

THE SCHOOL JOURNAL.

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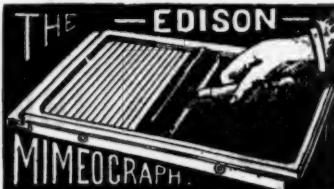
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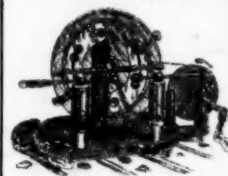
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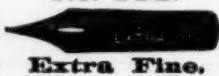
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New York City.

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EACH year the importance of school work is increasingly appreciated, and each year school studies are teaching more closely the work of the world. We are realizing that it is our duty to learn how to live well, rather than how to die well. The life that now is, is more and more appreciated.

WE have in this country a large number of men who are titled "superintendents"—some in cities and some in counties. It would be most instructive if these men could get together and speak their minds. Many are large men, but they produce small results compared with what they would in other callings. And then again there are men in these positions who could absolutely produce no results in any other calling.

The evils at the base are these: first, the schools are managed by boards of education, who give the superintendent no liberty of action; second, the superintendent is handicapped by a force of teachers who look at teaching from low points of view, have

little or no genuine preparation; third, he is unable to head his raw forces, and mold them into strong and capable teachers.

The educational problem in this country is obtaining skilful teachers; this has been seen by every reformer. As we are constituted, no sooner does a teacher become qualified than influences draw him away from the school-room; generally he can do better pecuniarily to leave. This obstacle must be taken into account, and larger and ampler means taken to increase the supply.

The true plan is for cities to have as superintendents men that can and do carry on a course of instruction for their teachers. When a teacher is appointed, let her also be appointed to a class in pedagogy, the course to extend over three or four years. Let the superintendents busy themselves in qualifying the teachers to teach. The superintendence in general should be done by the principals.

A great wrong is done to the children by employing only teachers that have been taught at some school in that city. Not long since a principal said: "All the teachers in this school are graduates of the school." It was proved by a very superficial examination that his "breeding in" process had yielded the same results in the school-room it did out. It is a grievous wrong to the children, and should be abolished.

From this brief statement it may be inferred that we do not think highly of the educational situation of things in our cities. No, we do not. If we know that the best teachers are sought for, no matter whether they graduated from a training school in that city or not, then we are prepared to feel interested. If we know the teachers are pursuing a course of study led by the superintendent, then we can begin to have assurance that "it is well with the child." If we further know that the board of education give him freedom of action, do not force him to give certificates to their friends or their clients' friends, then we have assurance doubly sure that the children of that city have the opportunities that the expenditure of money and the desires of the public entitle them to have.

COLUMBIA COLLEGE has entered into the field of human activities on an enlarged scale. First came the school of mines, then the school of law, and now the school of education; this last is to be under Dr. Nicholas Murray Butler's charge. The election of Mr. Seth Low, of Brooklyn, to the presidency, to succeed Dr. Barnard, brings forward a young and able man into a new and broad field.

IN a trial for manslaughter, it was shown that the man had greatly suffered from mental distress. A discussion arose as to whether this would make a man insane. A learned physician's opinion was asked, and he declared that all would turn on the education the man had. "An educated man will stand a strain that an uneducated man cannot stand. His mind is stronger; besides, he has something to think of; he can turn his mind to things outside of himself."

Here is encouragement for education from unexpected sources. And if we look at the insane class, we shall find that those who are educated are far less likely to suffer than the uneducated. All this comes from the great reason that true education is a natural process, and all attempts at education, while not yielding the best returns, give something that is in many ways better than no education.

CHARACTER force is the great force of the world. The history of the world shows this most conclusively. The real measure of a man's or a woman's power or possibilities is his or her character. The records of history are records of what

men of character have done. We may not approve of Alexander or Caesar or Napoleon, but they were men of character—note, not men of might merely. Nothing can be more exhilarating than the perusal of the histories of men like Abraham, Moses, and so on in sacred history; of Menes, Alexander, and so on in general history; of Confucius, Guatama, Plato, Bacon, Franklin, and so on, in the field of thought.

Now there is no field where character is so needed as a force as in the school-room, and in no place does it yield its results with so much certainty, for the objects on which it operates are young and impressive. We can easily see that while Bronson Alcott and Margaret Fuller and Horace Mann might not be productive teachers, they must have been powerful while in the school-room.

What is teaching? At a teachers' gathering, one declared the best definition was "telling another what he did not know before." Not so; this is a small and mean definition. It is really the superposition of higher upon lower natures. Hence a very learned man may be a failure; a questioner, really an obstacle. The seed will grow if the appointed influences are brought to bear upon it. So the child will be educated if the higher nature influences him to put forth his powers.

The practical question, then, is for the teacher to increase the volume (so to speak) of his character. It is too often a mere negative affair that cannot affect a child profoundly. Those who say I cannot interest my school, say in that breath they lack in character force. Teachers, it is your character that teaches.

THE people of the South are worrying over the "race problem." A subscriber in Atlanta says, "The people don't think of anything else." This is a waste of time and strength. The only thing to do with the negro is to educate him. Teach him, and he will be able to work profitably for himself and for his white neighbors. This is the decree of the great Creator, and those who oppose it will do it to their sorrow. "The sun dial of progress does not go backward."

But we see there is fear that if the negro is educated, he won't work. This is a mistake; the best educated people of this continent are the hardest workers. Certainly every one agrees that for two hundred years New England had the educated people of the continent within its borders, and yet there, too, were also the hardest workers of the continent. The negro now does no work he can avoid. Educate him, and he will work for pleasure; the educated man finds pleasure in work.

We wish it were possible to get some of those unscientific and narrow ideas about education and labor out of the heads of our Southern brethren. We wish they would stop worrying about the negro. Whether they worry over it or not, the negro is among them, and he will stay there. Let them see what we did when swarms of the Irish came to us. We erected public schools and got them into them. And what has been the result? They have become intelligent American citizens. So the negro must be educated. So elevated, he will be a help to the progress that is sure to set in in the South.

IN Baltimore the salaries of the primary and advanced teachers are the same. This is as it should be. The skilful primary teacher to-day certainly works as hard as the skilful grammar school teacher; and there is a stronger disposition apparent to equalize the salaries of these two classes. Another movement is apparent; the primary teacher of ten and twenty years ago will not do for to-day. Once it was thought anybody could teach the little children; now we find an inquiry for skilled teachers for the primary departments.

EDITORIAL CORRESPONDENCE.

I arrived in Pittsburg October 1. I found the city had changed very much since my previous visit. The dirt and gloom occasioned by the bituminous coal fires had disappeared; brightness and activity were seen on every side. Mr. Geo. J. Luckey is the superintendent of the schools, and has been for nearly twenty-five years. He is a very popular and level-headed man, and has done a good work. He courteously opened the school doors and cheerfully gave me much valuable information. There are 580 teachers; 30,000 pupils are enrolled; and \$320,000 is expended for teaching and superintendence—a little over \$10 per pupil, and at the outset this strikes one unfavorably—it is too cheap.

A visit was made to the Grant school, Miss M. J. Graham, principal; about 600 pupils attend, and 16 teachers are employed. There was a class of 15 pupils in cooking—this is the only manual training given in the city. "About 300 pupils receive instruction in this useful art," would be the neat way the old school of educators would put it. The new school looks at this more broadly, and says, "They are taught to observe carefully, think with a purpose in view, do for usefulness, and create pleasure by means of cooking." One thing I noticed; it may not be worth speaking of, but no class gave such undivided attention to the teacher, no class seemed so happy in all my rounds. There was one boy in the class, and he was as active as the rest.

The entire building was surveyed. The principal certainly is an unusually bright woman. Some of the teachers were doing superior work. I especially remember one who was teaching a class of little children to read. There was a life, an aptness, an employment of objective methods that made it apparent the "new education" had a true disciple in the person of this woman. The regular teachers give instruction in music, and it is well done; all the pupils in the classes I saw sang by note the simple pieces selected. Of course in the hasty visit I made I could not "sample" the school with exactness, but the teachers were plainly "down among the pupils," not up above them. It seemed as though they said, "Come with me." The spirit of Froebel, who said, "Let me live with the children," seemed abroad. It is educational skill, and not the rod, that is coming to be the effective force here.

Criticisms could be made. Some had but partial hold of the pupils in their classes. In one class (3d reader) slips cut from the newspapers were used in the reading class—this here, and I believe everywhere else, must prove a failure. The newspaper is not constructed for, nor adapted to, the school-room.

Supt. Luckey's report shows the course of study; it does not seem to me to address the "whole boy" in the spirit of those Pestalozzian truths that are beginning to spread over the continent. The spelling book has been taken down from its lofty pedestal; and objective methods are somewhat employed, but not enough. I learned that here, as in most parts of the country, there is little power in the hands of the superintendent; and then again he has no one to back him in attempting advance movements. Suppose he desires to go forward, will the fossils (always abounding in city schools) be found at his heels? or the young and inexperienced girls who enter upon teaching as a genteel business? For this reason we urge the plan of Supt. MacAlister, of Philadelphia—an organized system of instruction for the whole body of teachers. Supt. Luckey is well qualified for this. I am afraid there is little study of the science and art of teaching by the Pittsburg teachers. In the library at the rooms of the board of education, I saw no shelf of pedagogical books; thinking I had made a mistake, I looked again. This has been true of every city once. It is not true of New Haven, Providence, Springfield, Philadelphia, Washington, and many other cities now. In time all will have their libraries of pedagogical books, and use them, as the lawyers use their law libraries.

In the afternoon a visit was made to South Pittsburg to the school of the veteran principal Cargo. I was glad to see, a few blocks away, a new and commodious building in process of erection, for every room was crowded to the utmost. A spirit of earnestness was visible everywhere; it was a very hive of boys and girls.

THE HIGH SCHOOL.

I was met by the principal of the high school, Prof. C. B. Wood, on Friday morning, and looked upon the assembled students, some 800 in number; it was an inspiring sight. After visiting several rooms, and learning the plan of the school, I must confess I was both surprised and pleased. The principal is no ordinary

man. He is not only desirous of advancing, but knows what to do. Instead of making the school a machine to fit his pupils for college, he is running it on broad lines. He has lost a valuable man in Prof. Jackman, who has been taken away by Col. Parker. The interest created by him in biology is well attested by a visit to his old quarters. The appointment of Prof. Guttenberg, from Erie, in his place, is a good one; such men as Jackman and Guttenberg are hard to find. And then it is hard to find high schools that appreciate them. There was an energetic commercial department; the rooms and apparatus for chemistry are inadequate. Here I found an old colleague, Prof. B. C. Jillson, who was reckoned a most able man in chemistry in the Albany normal school while I was there.

I believe it will not be long before manual training will be taken up in Pittsburg; Supt. Luckey has put three letters in his report about this: one from Supt. A. P. Marble; one from Prof. Harris; one from Principal John D. Ford, of the Baltimore manual training school. I esteem Prof. Harris—on some subjects his opinions are valuable; on this, really worthless. Still, in this he endorses cooking. Supt. Marble is a bright man, but no authority on this subject whatever. Probably these letters published here have done a positive injury, but the reaction is sure to come.

ALLEGHENY CITY.

Crossing the river to Allegheny City, I found Supt. John Morrow in the new and elegant high school. He is well posted on education, and is making lines of progress. As it was Friday afternoon it was too late to see the teachers at work. It occurred to me that, if the educational situation was correctly indicated by the high school building, the city has a right to be proud. I am inclined to think that Supt. Morrow has what Carlyle calls "the grip of it."

This brief survey of things in Western Pennsylvania re-shows at once the difficulty of the problem. The great difficulty is that all, even the wisest, know very little about education; a bigger difficulty is that few are trying to know more. I believe the only solution is to be found in the superintendent getting his teachers together, and with them studying the subject. Every city now has a large quota of teachers who have never studied education, who have never practiced it. Of course they believe they have, but they have merely run a "knowledge mill," and oftentimes a "7x9" one at that. If Supts. Luckey and Morrow had the power to put their teachers into classes, and could carry them through a three or four years' course of study in pedagogics, etc., every school-room would be a heaven on earth. And here I may as well say out my thought, that I believe the best business the National Association could busy itself with, would be in laying out a course of study for teachers under the direction of the city superintendents, and then getting these men to put it through. I don't mean to get men to read a "paper" on this matter; I mean something better. Let Supts. Maxwell, Jasper, MacAlister, and others agree upon a course, and then report year after year what they have done about it.

Both coming and going I found State Supt. Higbee on the cars. He believes that county normal schools are to solve the problem of preparing teachers for the rural schools. Supts. Draper, of New York, and Higbee, of Pennsylvania, make a grand team; they have opinions, and they are not afraid to have them nor to state them. They do not make it their chief business to go about and declare, "We have the best and grandest schools on earth;" they are settling themselves at work to create better teachers and better schools. A. M. K.

CHURCH SCHOOLS AND PUBLIC SCHOOLS.

If there is one kind of education to be obtained peculiar to the public school, and another peculiar to the church schools it is our duty to find out what is valuable in each and decide which one is best. We believe that public school education is becoming more and more, of itself, unlike anything before known in the history of educational forces. In a general way the public school may be said to be progressive and the church school conservative. The ideal of one is the education of the child for the state and the world of business; the ideal of the other is education so as to become a loyal citizen of the kingdom of Christ. The end of one is culture, the other salvation. The doctrine of one is that there is good in every child that can be developed by natural processes; in the other, that every human being is conceived in sin and brought forth in iniquity. The public school does not

recognize the power of the law of Christ and the Holy Spirit, and prayer, and the sacraments as immediate and powerful forces, to be continually used in educating the child,—the church school acknowledges all of these forces as essential to true growth. The church school makes much of divine inspiration derived from the Bible as the revealed word of God, and the divine presence in the ordinances of the church; the public school honors the Bible only as a book to be read for its intrinsic worth, and not as a sacred revelation of God's own will. The church school appeals to the church for its support, and bases its argument for such aid on the higher doctrine of Christ's command, "Go teach all nations." The public school never appeals to the church for its life, but to the state, and bases its argument for such aid upon the statement that it contains within itself the elements of civil life; in other words, the state would perish from off the face of the earth if it were not for the public school. The church considers itself under obligation to educate only children of its members; the state acknowledges itself indebted to every child, to the extent that it owes each one the duty of giving it an opportunity to get the rudiments of common knowledge. Some go even further and declare that state education is so vital to the life of the state that every child should be compelled to attend some school, at least three months each year. Some go even further and say that every child should be compelled to attend a state school, and that all teachers in church as well as state schools should be required to hold a state certificate, and put themselves under the inspection and general direction of a state educational official. Some go even further and declare that all schools, except free public state schools, should be compelled to close their doors.

It was only yesterday that all the schools in this civilized world were church schools. But a generation ago the famous controversy took place in this city when Bishop Hughes claimed that the state was exceeding its prerogatives, when it taxed all property for the support of its schools. It was then decided that this state should undertake for itself, by itself, and through itself, the work of educating all its children, irrespective of nation, church, parentage, or condition of wealth and poverty. It then was decided to assume a mighty and increasing debt, to be paid annually, a debt that cost the state of New York the enormous sum of 15 millions of dollars the past year.

We know the readers of the JOURNAL must have noted that they are, through its pages, put in communion with the ablest educators of the world. Looking back over a few numbers only we find articles by:

Dr. C. M. Woodward, of the manual training school of St. Louis.

Prof. L. S. Thompson, supervisor of drawing in Jersey City.

Prof. John F. Woodhull and Prof. Theodore F. Seward of the College for the Training of Teachers, New York City.

Prof. J. A. Cooper, president of the Endinboro' (Pa.) normal school.

Prof. Edward E. Sheib, of the state university of South Carolina.

Prof. Peter T. Austen, of Rutgers College, N. J.

Prof. George Griffith, of the New Paltz normal.

Prof. W. J. Ballard, Supt. of schools Jamaica, L. I.

These are but a part of the list of writers who steadily contribute. Dr. Jerome Allen, the head of the University School of Pedagogy, writes for every number. Mr. Amos M. Kellogg, now greatly improved in health, is back in the editorial chair again, and in general charge. It will thus be seen that the JOURNAL is sparing no labor or skill to be adequate to the needs of the teacher who wishes to be worthy of the high position he occupies.

THOROUGHNESS does not, however, mean completeness as to quantity, but as to quality. The mistake is often made of supposing that, to be thorough, a subject must be wholly mastered, and time is wasted in striving after what is not suited to the circumstances, nor to the present attainments of the pupil. Thorough instruction insures correctness, clearness and command of knowledge, and such degrees of certainty as the subject and condition of the pupil admit of. These may be secured and tested at each step of progress, and thus the grand moral principle established that to be is more than to seem.—PROF. JOSEPH MARSH.

NINETY-NINE per cent. of ambition to try, and one per cent. of talent, is all that is necessary to success in whatever we undertake.

CONCERNING SCHOOL MANAGEMENT.

By PROF. GEORGE GRIFFITH, New Platz State Normal School.

II.

CORRECT IDEAS OF GOOD MANAGEMENT.

If a traveler does not know where he has started for, he is quite likely not to reach the correct goal. So, too, it is very important in all our work, that we should not labor in a hap-hazard manner; but should have definite ends in view, and positive though flexible plans for attaining those ends. "What is the object of studying geography?" "What are you trying to reach by this way of teaching bank discount?" "Why did you treat that case of disorder in that way?" Many times have I asked myself and others questions like these. Many times has come the answer, worded in one form or another, "I do not know." My reply is, "You are then failing or inviting failure." So in school management, it is very important that we all have correct ideas of what constitutes good discipline. I do not hope to say anything new upon this point, but may present some truths in a light new to some.

When is your school in order? I answer, when it is quiet enough for the most effective work, when all the pupils are willingly working at their proper tasks during working hours, when there is courteous behavior at all times in and about the school building, when the pupils respect you, their teacher, and obey you promptly in all reasonable requirements, when they are daily learning to reverence and obey rightful authority, when they are slowly but surely acquiring the power of self-government, and when in all this their moral natures are daily becoming better and stronger.

The time was when it seemed to be "the chief end of man" (the one who happened to be a teacher) to flog or frighten his pupils into perfect stillness. This we unhesitatingly condemn. There is the order of life and the order of death. Give us the order of life in our school. But in the reaction of these days of reaction in school matters, I fear many teachers, especially young teachers ambitious and enthusiastic to excel in the most advanced ways of teaching, have fallen into the opposite fault. I have seen some who seemed to think their pupils were not working well unless they were making lots of noise and stir about it. Spontaneous and earnest school work will unavoidably cause some noise in the school-room; but such work will be most effective when there is such quiet that the pupils' minds shall neither be wearied nor distracted by the noise. Strive then for a quiet school, but let it be quiet in work, not quiet in intellectual death.

How to secure at the same time sufficient quiet for the most effective work, and willing, spontaneous, and constant work from the pupils, is a difficult task. As we secure the one the other seems to be lost. I should say, in ordinary circumstances secure the latter first, and then steadily strive until the former is secured.

One of the evils of too severe external constraint in school hours in order to force quiet, is that out of school hours, even in and around the school building, the pupils are apt to become rough, boisterous, and unruly. The bent bow springs far back when the tension is relaxed. Do not rest satisfied, then, until you so govern that your pupils, out of hours, in and about the school grounds, are neither rowdies, hoydens, nor wild Indians in their actions. A very effective way to break up such habits when once prevalent in a school, is to call school whenever it occurs, telling the pupils why you do so. Of course no one will think it necessary to make the recesses resemble funerals.

Alexander Bain in his *Science of Education* says, as quoted by Swett: "The awe and influence of authority are maintained by a certain formality and state." If I cannot command the respect and obedience of my pupils by my character, my scholarship, and my justice, without the "awe" that comes from a certain formality and state, I will go without either, and quit teaching for more suitable work. But while one teaches he should so act as to command respect, and should secure at all hazards perfect and prompt obedience to all requirements.

While pupils are paying such respect and rendering such obedience, they are acquiring one very desirable element of good citizenship, viz., reverence for, and obedience to rightful authority. This reveals another end of school discipline, preparation for citizenship. Many seem to think that school government has its ends, as well as exercise, wholly in the school. This is not so and every teacher should remember this truth. Do not have such narrow views of school government. Not

only should you in this consciously train for good citizenship, but in this country, especially, you should strive to cultivate in every pupil the power and exercise of self-government.

Finally we should think much upon the effect of our deeds and requirements upon the moral nature of our pupils. This, I feel is an important field for thought. When about to make some requirement or mete out some punishment, try to put yourself in the place of your pupils. Ask yourself how it would affect you, how the resulting disposition would be likely permanently to affect your moral nature. Let your honest, thoughtful answer to such inquiries determine your course of action.

THE LAWS OF PEDAGOGY AS APPLIED TO MUSIC.

By THEODORE F. SEWARD.

In all the widespread and more or less excited discussions of pedagogical methods, as applied to various subjects, one principle is accepted as fundamental. The method must be natural, or founded upon the laws of nature. This marks out an unmistakable pathway for the teacher of music.

Music is peculiarly a language of nature, and therefore ought to submit most easily to natural laws. In deciding upon the best method of teaching it, we have only to study those laws and adapt ourselves and our methods to them. They may be briefly stated as follows:

1. The language of music has one alphabet of tones and not a number of alphabets. Thirteen scales are necessary for musical instruments, but not for the voice, which sings all scales as one.
2. The musical alphabet or scale is not found, as such, in nature. It must not, therefore, be presented to the beginner as a whole, nor in the step-wise or scale succession of the tones, but in the order in which they are found in nature.
3. As the *chord* exists in nature, it should be used as the avenue of approach to the tone world. The chord or triad which is first presented, establishes itself in the mind as the basis of musical thought. It is called the tonic chord.
4. The chords must be developed in the order of nature: after the tonic, the fifth or dominant; after the dominant, the fourth or sub-dominant.
5. In accordance with an imperative law of the human mind, a name must be associated with each tone, as with all other objects which are to be the subjects of consideration.
6. As the names are not only for designation, but for use in singing, they should be as vocal and euphonious as possible. The syllables in common use fulfil the conditions admirably, with the exception of the seventh, *se*, which duplicates the *sibilant*, the most unpleasant sound in our language. The substitution of *te* for *se*, which avoids that fault, and also introduces a new consonant element, is now becoming quite common.
7. The written or printed signs for the tones should be such as give the most direct or immediate suggestion of the tones. Nothing can do this with more certainty than the initials of the syllables with which the tones are associated. These are *d, r, m, f, s, l*, and *t* for the syllables *doh, ray, me, jah, soh, lah*, and *te*. The tones above and below the octave are designated by numerals placed at the top or bottom of the letter. The seven letters, therefore, represent the whole range of tones from the lowest to the highest, except the chromatic tones.
8. No other names should be employed till they are needed for a definite purpose. This, which is a universal law in education, is broken in the very first lesson by staff teachers, who use three names at the outset, viz.: syllables, letters, and numerals.
9. As chromatic tones have the same relation to the diatonic scale in all keys, they should have one invariable mode of representation.
10. If a change of key (modulation or transition) occurs in music, the change should be indicated in the notation.
11. As a knowledge of harmony is essential to an intelligent understanding of music, a musical notation, to be adequate should lead easily to a knowledge of tones in chords.

The foregoing laws arise from the essential nature of the art of music and especially from the vocal expression of the art. Not one of the laws is obeyed in the staff notation. Its violations of educational principles may be summed up as follows:

1. It presents thirteen scales instead of one.
2. Its symbols are exceedingly complex. It requires a combination of three different signs (staff, clef, and note) to represent a single tone. For all the tones, the combinations are almost unlimited, amounting to several hundred.
3. Chromatic tones, which are the same in all the keys, are represented by different signs in different keys. More than this, the meanings of the signs are interchangeable, as if, in mathematics, plus should sometimes mean minus, and minus, plus.
4. Changes of key or modulations are not indicated, but are obscured by their representation on the staff.
5. The masses of the people are practically debarred from a knowledge of harmony by the staff notation. The chord-relations being presented in thirteen different ways, the subject is so confused that very few, even of the most skilful players or singers understand it.

The Tonic Sol-fa notation, on the contrary, has every characteristic of a pedagogical method:

1. It presents tones as objects of perception.
2. It has but one name and an unchangeable sign for each tone.
3. Each fact or principle acquired leads naturally to the succeeding one.
4. The eleven educational laws first mentioned in this treatise are in reality, statements of the leading characteristics of the Tonic Sol-fa methods.

EDUCATIONAL SCIENCE.

AN OUTLINE FOR STUDY.

In a recent editorial we pointed out the distinction between principles, methods, and devices. Now, in coming to the discussion of methods, the first question we must settle is, "What is education?" Our methods will be determined by our ends and aims.

I. HISTORICALLY. What has the civilized world thought of education?

a. The oldest nation—the Chinese—what has been their conception of it?

b. The old Hebrews—who was thought to be the best educated man among them? What was their highest ideal?

c. The Athenian thought. What was an educated man at Homer's time? at the time of Draco and Solon? of the sophists? of Socrates, Plato, Aristotle, Zeno, Epicurus? What made Demosthenes what he was? Unless the people had been educated to appreciate his arguments, he could never have delivered his orations. This is a great subject, and an important one, too. The Roman republic and empire were what they were because the education of the boys was what it was.

What was the Roman conception of education? What Cicero's, Quintilian's, Seneca's, Marcus Aurelius'?

What did the early Christian schools teach? Who was thought to be the ideally educated man among them? The early monastic and convent schools. The schools of Charlemagne. The classical schools after the revival of learning.

The Baconian ideal, or the scientific spirit applied to school work. The later scientific spirit. Our present scientific schools. What is their conception of education?

The growth and development of the natural or the Pestalozzian ideal, commencing with Ratich and Comenius, and continuing through the "Emile" to Pestalozzi and Froebel, and to object teaching, manual training, and the new education.

Why should we study the historical ideals of education in order to get a correct definition of what the correct training of a human being should be? Because the only means of correcting natural mistakes is by the study of history. We must know the experiments of our predecessors. A wise man speaks from the standpoint of experience. A true prophet forecasts the future from the results of past effort. Experience is the only lamp by which our feet are guided, if they are guided right. Hundreds of things are brought forward as new and good that have been exploded long ago.

The remaining topics to be understood before an intelligent definition of education is arrived at are as follows:

II. THE THEORETICAL CONCEPTION OF EDUCATION. Good theorists have their places. We must respect such theorizers as Plato, Aristotle, Pythagoras, Cicero, Quintilian, Abelard and the Schoolman, Ratich, Locke, Milton, Rousseau, Rabelais, Bain, and Spencer. What were their theories?

III. THE PRACTICAL IDEAL. Sparta had this ideal. Rome had it somewhat. We have it now, as shown by our trade, music, drawing, and business schools.

IV. THE PHILOSOPHICAL DEFINITION. This comes directly from psychology, and the study of the mind of the child.

V. THE DOGMATIC STATEMENT. This finds expression in our graded school courses of study, and in the old college curriculum. Its law is, *do what I tell you*. According to this ideal an education consists in mastering the technicalities of an empirical course of study, in getting good marks, and in graduating; at which time the education is considered complete.

Will each one of the readers of this article formulate a definition, and send it to us, not for publication, but for private use.

THE SCHOOL ROOM.

In this department will be found methods of presenting subjects and of teaching them, founded on sound principles of mental development. It is intended that they be the best (not always the only best), whether new or old.

GRUBE'S METHOD OF TEACHING PRIMARY ARITHMETIC.

Grube says: "We cannot impress too much upon the teacher's mind that each lesson in arithmetic must be a lesson in language at the same time. This requirement is indispensable with our method. As the pupil in the primary grade should be generally held to answer in complete sentences, distinctly and with clear articulation, so, especially in arithmetic, the teacher has to insist on fluency, smoothness, and neatness of expression, and to lay special stress upon the process of the solution of each example. As long as the language for the number is not perfect, the idea of the number is also defective. An example is not done when the result has been found, but when it has been solved in a proper way. Language is the only test by which the teacher can ascertain whether the pupils have perfectly mastered any steps.

"Teachers should avoid asking too many questions. Such questions, moreover, as prompt the scholar by containing half the answer, should be omitted. The scholar must speak himself as much as possible.

"In order to animate the lesson, answers should be given alternately by the scholars individually, and by the class in concert. The regular schedule of figures (which in the following will continually re-appear) are especially fit to be recited by the whole class.

"Every process ought to be illustrated by objects. Fingers, lines, or any other objects will answer the purpose, but objects of some kind must always be presented to the class.

"The operation at each new stage consists in comparing or measuring each new number with the preceding ones. Since this measuring can take place either in relation to difference or in relation to quotient, it will be found to comprise the first four rules, which will spontaneously result from an application of the several numbers to objects. This application to objects should invariably be followed by exercises in the rapid solving of problems, and a review of numerical relations of the numbers just treated, in more difficult combinations. In connection with this, a sufficient number of examples in applied numbers is given to show that applied numbers hold the same relation to each other that pure numbers do."

Mr. Grube subjects each number to the following process:

I. Exercises on the pure number, illustrating with objects:

(a) Measuring (comparing) the number with each of the preceding ones, commencing with 1, in regard to addition, subtraction, multiplication, and division, each number being compared by all these processes before the next number is taken up for comparison.

(b) Practice in solving such examples rapidly.

(c) Finding and solving combinations of the foregoing examples.

II. Exercises on examples with applied numbers.

Now, omitting his treatment of 1, let us note the application of the number 2:

TREATMENT OF THE NUMBER TWO.

I. Pure number.

(a) Measuring (comparing) ∞ 2.

$1+1=2$, $2 \times 1=2$, $2-1=1$, $2 \div 1=2$.

2 is one more than 1. 1 is one less than 2.

2 is twice 1. 1 is one-half of 2.

(b) Practice the rapid solution of these examples.

(c) Combinations.

What number is contained twice in two?

2 is the double of what number?

Of what number is 1 one-half?

What number must I add to 1 to get 2?

II. Applied numbers.

Fred had two dimes, and bought cherries with one of them. How many dimes had he left? How many 1-cent stamps can you buy for 2 cents? (Additional examples.)

TREATMENT OF THE NUMBER THREE.

I. The pure number.

(a) Measuring.

(1) By 1. ∞ 3.

$1+1+1=3$, $3 \times 1=3$, $3-1-1-1=0$, $3 \div 1=3$.

The last should be read: I can take away 1 from 3, three times, or 1 is contained in 3 three times.

(2) Measuring by 2. ∞ 3.

$2+1=3$, $1+2=3$, $1 \times 2+1=3$, $3-2=1$, $3-1=2$, $3 \div 2=1$ and 1 remainder.

The last should be read: I can take away 2 from 3 once and 1 will remain, or 2 is contained in 3 once and 1 over.

3 is one more than 2, 3 is 2 more than 1, 2 is one less than 3, 2 is one more than 1, 1 is 2 less than 3, 1 is 1 less than 2, 3 is 3 times 1, 1 is the third part of three.

(b) Practice in solving examples rapidly.

How many are $3-1-1+2$? $1+1+1-2+1+1-2+1+1$?

Answers to be given immediately

(c) Combinations.

From what number can you take twice 1 and still keep 1?

What number is 3 times 1?

II. Applied numbers.

Anna paid two dollars for a pound of tea, but her mother gave her three dollars. How much did she bring back to her mother?

TREATMENT OF THE NUMBER FOUR.

I. The pure number.

(a) Measuring.

(1) By 1. ∞ 4.

$1+1+1+1=4$, $4 \times 1=4$, $4-1-1-1-1=0$, $4 \div 1=4$.

(2) Measuring by 2. ∞ 4.

$2+2=4$, $2 \times 2=4$, $4-2=2$, $4 \div 2=2$.

(3) Measuring by 3. ∞ 4.

$3+1=4$, $1 \times 3+1=4$, $4-1=3$, $4-3=1$ (1 remainder.)

Name animals with 4 legs and with 2 legs, wagons and vehicles with 1 wheel, 2 and 4 wheels.

Compare them.

4 is 1 more than 3, 2 more than 2, 3 more than 1.

3 is one less than 4, 1 more than 2, 2 more than 1.

2 is 2 less than 4, 1 less than 3, 1 more than 1.

1 is 3 less than 4, 2 less than 3, 1 less than 2.

4 is 4 times 1, 2 times 2.

1 is the fourth part of 4, 2 is one-half of 4.

(b) Problems for rapid solution.

$2 \times 2-3+2 \times 1+1-2 \times 3$?

$4-1-1+1+1-3$, how many less than 4?

(c) Combinations.

What number must I double to get 4?

Of what number is 4 the double?

Of what number is 2 one-half?

Of what number is 1 the fourth part?

What number can be taken twice from 4?

What number is 3 more than 1?

II. Applied numbers.

4 quarts=1 gallon.

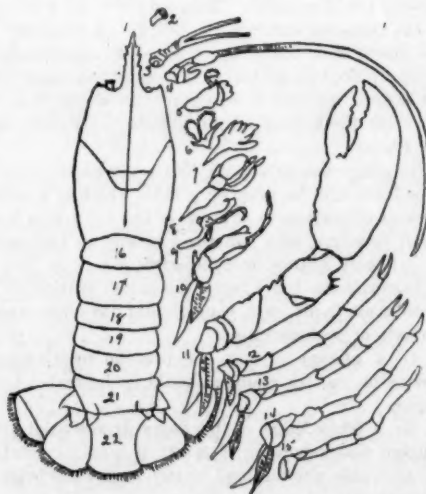
Kate bought a gallon of milk, how many quarts did she buy?

She paid a dime a quart. How many dimes did she give?

LESSON ON THE LOBSTER.

By A. C. BOYDEN.

(Reported by Mrs. C. L. S. Bass.)



Have a lobster before you on a large table, if convenient, and allow the class to stand around the table. As you take off the parts place them in order, as shown in the diagram, numbering them. Write the analysis upon the board to correspond, for the class to copy afterward.

Observe, give properties, and uses of each part as it is taken off, and add anything of interest.

THE LOBSTER.

WHOLE.

Lives in water.

Jointed, body and legs covered with a crust.

MAIN PARTS.

Cephalothorax (head and thorax united), abdomen, 10 legs.

HEAD.

PROPERTIES.

1. *Beak*, thick, sharp, pointed.
2. *Eyes*, black, on stalks, in a socket, made of little eyes.
3. *Small Feelers*, — branched, sac at base.
4. *Large Feelers*, — half as long as body.
5. *Jaws*, — hard, work sideways, — hairy feelers.
- 6-7. *Helping Jaws*, — hairy, many parts.
- 8-10. *Foot Jaws*, gills attached, — flaps.

USES.

Protect brain and eyes.
To see its prey in all directions.
As ears, — sac with liquid containing sand, — hairs which contain nerves.
Feelers for Food.
Crush food, — organs of taste.
Arrange food like a tongue.
Bring food to mouth, — propel water to gills.

THORAX.

11. *Large Claws*.

12-15. *Smaller Claws*, seven joints, — different angles, pincers on all but last two pairs, — gills attached and flaps.

Holding, — grasping, — crushing, — fighting.
Crawl, — grasp food, propel water.

ABDOMEN.

16-20. *Rings*, — each except the last with pair of paddles.

Swimming and holding eggs.

INTERNAL PARTS.

Muscles — show need.

Stomach — with teeth.

Liver, green, large, around intestine.

Heart, on back.

MOULTING.

SIMILAR ANIMALS.

Cray fish, fresh water.

Crabs, Hermit crabs, "Fiddlers."

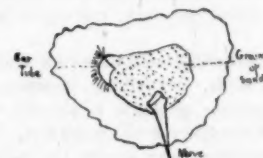
Beach flies, in sand under stones.

Barnacles, on rocks and ship bottoms.

Pill-bugs, under boards in cellars.

The eyes are usually held straight out the length of the stalk, but when the lobster is frightened they are drawn back into the socket and protected from injury.

The lobster's ears are seated in the base of the small feelers; they may be detected by a clear oval space on the upper side. A wave of sound disturbs the grains of sand in the sac, the vibrations affect the sensitive hairs, and thus the impression of a sound is telegraphed along the auditory nerve to the brain.



The jaws are like a pair of mill-stones and crush bones and shells. The fine hairs fringing the mouth parts and legs are organs of touch.

The large claws are quite formidable, as the lobster bites with them anything that comes in its way. They even pull off each other's claws, but fortunately another will grow out in a few weeks.

The segment 21 with appendages and 22 are used to shut suddenly under, and so propel the lobster backward several feet at a time.

Food is further masticated in the stomach by a complex arrangement, somewhat resembling teeth.

The lobster moults during midsummer. The shield splits from its hind edge as far as the base of the beak, where it is too solid to separate, and the lobster then draws its body out of the rent. The stomach, with the solid teeth, is cast off with the old crust or skin.

The lobster lives on a rocky bottom, where it hides under rocks, its long antennae, or feelers, extended out of its retreat. Its food is fish and other animals, and it is also a scavenger. In life it is dark green with some reddish tints. The flesh is used for food.

ARITHMETIC.

In the work in arithmetic accuracy is the most important feature, but rapidity should be cultivated as early and as thoroughly as possible. In giving problems applying new principles, only those numbers that are within the comprehension of pupils should be used.

Pupils should not be allowed to learn the rules of arithmetic. If the principles are thoroughly taught, no set rules will be necessary. They should be trained carefully in all grades in problems applying the common transactions of every-day life, and such short methods should be introduced as are applicable to the work in hand. As an aid to short methods constant use of cancellation should be made.

THE EARTH.

GEOGRAPHY BY OBJECTIVE METHODS.

BY AMOS M. KELLOGG.

[CONTINUED FROM SCHOOL JOURNAL, SEPT. 14.]

LESSON IX.

The teacher stands at the blackboard and says, "I will draw a map of Michigan; it is north of Indiana and Ohio. You may name the boundaries." (He draws the eastern boundary.)

"Eastern boundary of Michigan, Lake Huron, Lake St. Clair, Lake Erie." (He draws the southern boundary.)

"Southern boundary of Michigan, separates from Ohio and Indiana." (He draws the western boundary.)

"Western boundary of Michigan, Lake Michigan." (For the present the upper peninsula is omitted.)

The shape, you see, is like a left hand mitten." (Map 11.)



He erases and draws it again and again, the pupils giving the boundaries.

Then the rivers and cities are placed; the names are given, written on the blackboard, and copied by the pupils.

Volunteers are called for; the state is drawn by them; comments are made, and thus the pupils themselves give the proportions of the state.

PROPORTIONS.—The bottom width of Michigan and its height to the end of the thumb are equal; and Saginaw bay is half way up.

REVIEW.—The teacher rapidly draws Ohio, the pupils naming boundaries, rivers, and cities; he then joins the map of Indiana, the pupils naming boundaries, rivers, and cities; to this he joins the map of Michigan, the pupils naming boundaries, rivers, and cities. (Map 12.)



This repetition will familiarize the pupils with the great features of each state. Questions will follow on the proportions of each state, so far.

COMPARISON.—The western boundary of Ohio is the same length as the southern boundary of Michigan. The northern boundary of Ohio reaches to the middle of

the southern boundary of Michigan.

The teacher can now assign the drawing of these states singly and in combination for desk work.

LESSON X.

The teacher begins with Ohio and rapidly draws Indiana and Michigan, the pupils naming the lines. Then the drawing of these states is assigned to certain pupils. As they are drawn, criticisms will be made to fix the proportions of the state.

"What of the height and width of Ohio?"

"They are equal."

"But are they in Mary's map?"

"What of the width and height of Indiana?"

"It is about half as wide as high."

"But is this the case in John's map?"

"What is the distance from Michigan, southern boundary, to Saginaw bay?"

"Half the height of the state."

"What is the distance from end of thumb?"

"The same length as the southern boundary."

"Is it so in Hattie's map?"

Some pupils may be asked to join Ohio and Indiana. In the criticism on these maps to fix the comparative size the teacher will ask:

"What is the width of Indiana compared with Ohio?"

"It is three-fourths as wide."

"Is it in Henry's map?"

Having these few proportions in their minds, the children will easily draw the three states. Do not give too minute proportions; this is a rock on which many a teacher has foundered.

FOR REVIEW WORK.—1. Assign Ohio to each of three pupils, to be drawn in two minutes.

2. Assign Indiana to be drawn in two minutes.

3. Assign Michigan to be drawn in two minutes.

4. Assign Ohio and Indiana to each of three pupils, to be drawn in four minutes.

5. Assign Ohio and Michigan in the same way.

6. Assign the three states for five-minute maps.

These maps will be quite rough at first, but in a very few weeks very neat maps will be made in two minutes.

The teacher assigns Illinois for study.

LESSON XI.

The teacher rapidly draws Ohio and joins to it Indiana, the pupil naming the lines. As the northern boundary of Illinois is placed on the board, the pupils will promptly say:

"Northern boundary of Illinois;" because they have caught the idea by this time. When the Mississippi river is drawn, the pupils say:

"Mississippi river, separates Illinois from Iowa; from Missouri."

When the Ohio river is extended, the pupils say:

"Ohio river, separates Illinois from Kentucky."

The teacher erases all but Illinois; he points out its general shape, and then erases it and proceeds to draw it again.

PROPORTIONS.—The western boundary is like a vase. The state is twice as long as wide; it extends as much above Indiana as below it; its northern boundary is equal to that of Indiana—three-fourths of Ohio.

Then a pupil undertakes the drawing; he is encouraged, and is followed by as many as the blackboard space will permit.

If the teacher draws rapidly and requires rapidity, a class of thirty or forty may each have an opportunity to draw.

There should be criticism of the right kind, as to proportions of the state, length of rivers, and location of cities. The

teacher must not be too exacting; always encourage even the least successful.

Call attention repeatedly to natural features, to the vase-like shape of the western boundary, for example; these fasten themselves readily in the memory.

LESSON XII.

Illinois is drawn by the teacher.

Beginning at the northwestern part of the state, the Rock river is drawn, and then the Illinois and its two branches, the Fox and Kankakee; then the Kaskaskia, the Little Wabash, and the Embarras. As each is drawn the teacher gives the name, writes it on the board, the pupils pronounce it, and copy it on their slates. Then the cities are indicated by figures; the teacher places (1) on the map, and the pupils call out:

"Chicago, situated on Lake Michigan, the largest city in Illinois." He marks (2) on the map and gives the name, the pupils calling out:

"Peoria, on the Illinois river." He marks (3) and gives the name, the pupils calling out:

"Quincy, on the Mississippi river." He marks (4) and gives the name; they call out:

"Springfield, the capital, situated on the Sangamon river." He marks (5) and gives the name, and they call out:

"Bloomington." (Map 13.)



LESSON XIII.

REVIEW.—The teacher draws Illinois, and takes the pointer, and, facing the class in an easy position, describes the map of Illinois, giving the marked features (not the minute ones)—its cities, its rivers.

"This is a map of the state of Illinois," etc.

1. He points out its shape—its west side is like an urn or vase, refers to the bend in the Mississippi river where the Missouri enters; extreme length, twice the width; that it extends below Indiana as much as it does above it; that its southern point is under the middle of northern boundary.

2. He now draws Illinois again for a repetition lesson. The pupils name all the lines and figures. This will be done very rapidly.

3. (a) Three volunteers will now be called for, to draw Ohio;

(b) Ohio and Indiana;

(c) Ohio, Indiana, and Illinois;

(d) and Ohio, Indiana, Illinois, and Michigan.

While the maps are being drawn, the teacher may ask questions about each state of those not then occupied. When maps are ready, the pupils may be called on to explain them.

4. The maps being erased, the pupils will draw these maps on their slates or on paper, with the lead pencil.

Passing along, teacher can criticize the maps.

"Too long for the width."

"Illinois river comes in too low down," etc.

This will stimulate map-study.

Volunteers will now be called on to

draw Illinois. "Who can draw the state of Illinois?" Let four draw it while the teacher holds his watch in his hand, giving two minutes for the work. If they produce one like this, (map 14) there is ground for encouragement.



LESSON XIV.

A TALK ABOUT ILLINOIS.—The teacher will talk about the early history of the state; about Chicago, its tunnel for water, its parks, the great fire, its fine buildings, etc. The "talk" about Ohio will furnish the plan. Of this "talk" the pupils should take notes, that they may reproduce it.

The teacher will ask for pen and ink maps, to be made at home, the best to be pasted in the "School Album;" the others to be filed in envelopes.

REVIEW.—The teacher draws Ohio, then adds Indiana, then Illinois, and pupils draw rivers and locate cities, as called for by other pupils.

Again a pupil draws Ohio (2 minutes); another annexes Indiana (2 minutes); another adds Illinois (2 minutes); another Michigan (2 minutes). There will be difficulties about the proportion at first, but practice will overcome them.

LESSON XV.

The teacher draws Ohio. He proceeds then to extend the eastern boundary southward, and says:

"This is the western boundary of Pennsylvania." (The pupils repeat it.)

He draws the northern boundary of Pennsylvania, and the pupils say:

"Lake Erie, northern boundary of Pennsylvania."

Then he draws the Delaware river, and the pupils name and describe it; then he draws the southern boundary, and the pupils name it.

Next the rivers are drawn, the Allegheny, the Mononghela, the Susquehanna, the Juniata, the Schuylkill, the Lehigh. As each is drawn the teacher gives the name, and the pupils repeat it; he also writes the names on the blackboard, and they copy them on their slates.

Then the cities are indicated by figures to show their rank in respect to population, 1 Philadelphia, 2 Pittsburg, 3 Allegheny City, 4 Scranton, 5 Reading, 6 Harrisburg, the capital. These are all written on the blackboard.

PROPORTIONS.—The northern boundary of Pennsylvania is $1\frac{1}{2}$ times its western boundary.

COMPARISON.—The western boundary is $\frac{2}{3}$ (nearly) of the height of Ohio, as was shown when Ohio was drawn.

The same course is then pursued as in the case of Ohio.

1. The teacher draws, the pupils giving the names.

2. A pupil draws, and other pupils give the names.

Criticism will be given on proportion and shape. To say that the eastern boundary is a W, which begins at Philadelphia, will help its remembrance very much.

[TO BE CONTINUED.]



EXERCISES FOR PHYSICAL DEVELOPMENT.

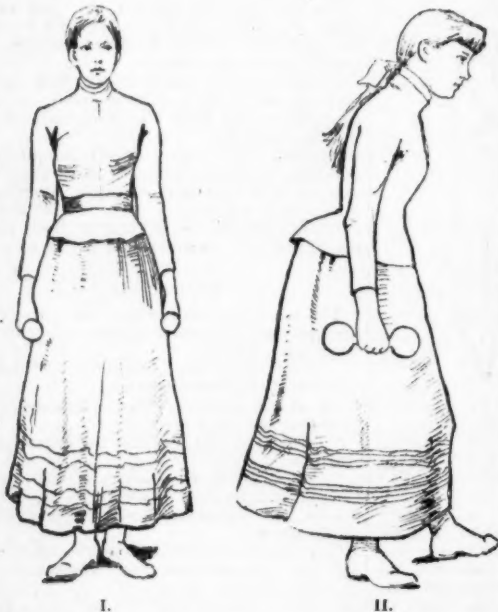
By SUPT. W. J. BALLARD, Jamaica, N. Y.

Teachers at present are being told pretty often that they ought to see to the physical development of their pupils. Just what they ought to do is not very definitely stated. The object of this article is to tell them what should be done, and how to do it. Teachers may rest assured that the exercises given are both practical and practicable. They have been worked out in the school-room, and are the result of long and careful study and observation. They may be given with or without dumbbells, with or without music, in a room set apart for the purpose, in the aisles or behind the desks of a class room.

A good time for exercising is between ten and eleven o'clock in the forenoon, and between two and three in the afternoon; the length of time required will average about ten minutes. Of course the room should be well ventilated. In cold weather, if ventilation is obtained by opening the windows, shut them three or four minutes before closing the exercise.

If music is used, anything in common time will do, though it is better if bright and lively. In counting, count *one* and, *two* and, *three* and, etc., to *eight* and. This is called one *eight*, containing sixteen counts; the number of eights to be counted is given after each set of movements.

In almost every movement, many different muscles are exercised; those called upon most vigorously are spoken of.



No. 1. ATTENTION.—Body erect, arms hanging easily, bells horizontal and parallel, heels together, feet at an angle of about 60 degrees. Fig. I.

No. 2. READY.—Upon first eight counts leader may salute class by bowing; upon last eight counts class bow. If class is composed of girls, and space will allow, the right foot may be brought back slightly in bowing. Fig. II.



III.

No. 3. Upon two in the next measure charge diagonally to the right, foot advanced about twenty inches,



IV.

V.

knee in vertical line with toes, left bell upon hip, right arm extended, bell level with eyes, body rigid; 1 eight. No. 4. Same to left.

No. 5. POSITION.—Same as first position, excepting that the bells are in same straight lines instead of parallel. Fig. IV. 1 eight.

No. 6. Upon first eight counts bring bells slowly to vertical position over head, bells touching, slowly inhaling. Fig. V. Upon next eight counts lower bells to position, slowly exhaling; 4 eights.

Expansion of lungs.

No. 7. With bells upon hips (Fig. VI.) upon first four counts rise upon toes as high as possible, and descend upon second four counts; 4 eights.

Muscles back of leg below the knee.

No. 8. Upon first two counts rise upon heels and descend, as little movement of body as possible; 4 eights.

Muscles front of leg below the knee.

No. 9. Upon first four counts (music a little slower,) charge diagonally to the right, as in No. 3, but bending the right knee much more, (Fig. VII.) keeping both feet flat upon the floor; upon second four counts straighten right knee and bend left knee, but not changing position of feet. 2 eights.

Or, place right foot behind left, and sink until right knee touches floor, then rise. Same counts as in preceding.

No. 10. Charge to left and then similar to above; or, place left foot behind right, and sink until left knee touches the floor; then rise. 2 eights.

No. 11. Throw both bells back of shoulders (Fig. VIII.), then straighten arms, bend body forward, bring bells to floor if possible (Fig. IX.). 4 counts; bring bells back of shoulders, 4 counts; 4 eights.

Muscles back of leg above the knee, the muscles of the back, and, when the body is bent well backward, the abdominal muscles.

No. 12. With bells upon hips, twist body vigorously to right and left; 4 counts from front to either side and back. Fig. X. 2 eights.

VII.



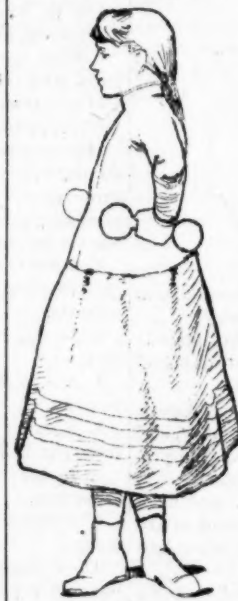
VIII.



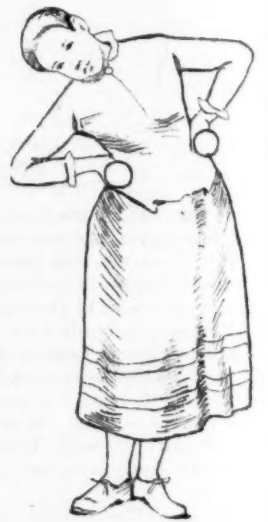
IX.

Side, back, and abdominal muscles. Also many muscles of the legs.

No. 13. Same position, bend to right and left. Fig. XI. Same count; 2 eights.



X.



XI.

No. 14. Same as 13, but twist from the waist; do not turn the hips.

No. 15. Same as 13.

No. 16. On first four counts place left bell in right hand, arm hanging by side; on next two counts carry bells straight out from side to vertical position. Fig. XII.; 2 eights.

No. 17. Repeat No. 16 with left arm.

Muscles on top of shoulders.

No. 18. With arms hanging by side, raise right shoulder as high as possible, then lower, one count on each movement; 1 eight.

Same with left; 1 eight.

Alternately, 1 eight.

Simultaneously, 1 eight.

Shoulder muscles.

No. 19. With right foot advanced diagonally, pass left bell into right hand, bring them on the first four counts somewhat back of vertical position (Fig. XIII.) in next four counts bring bell to floor in front of right foot (Fig. XIV.); on next four counts bring bells back to first position, bending well back. Continue through 2 eights.

No. 20. Repeat 19 with left.



XII.

Front and back shoulder muscles.

No. 21. With bells horizontal, four balls in same straight line, and level with eyes (Fig. XV.), knuckles down, on first two counts throw bells down and back as far as possible; same count on the return. Fig. XVI. 4 eights.

Muscles front and back of shoulders.

No. 22. Bring right foot short step back; throw upper part of body well back; arms straight; strike bells over chest, on the even accented notes. Fig. XVII. 2 eights.

Muscles of chest.

No. 23. Bend well forward, arms hanging straight down in



XIII.



XIV.

front, four balls of bells touching, throw bells upwards, strike the bells on the return count as in No. 22. Fig. XVIII. 2 eights.



XV.



XVI.

Back muscles of shoulders.

No. 24. On first two counts carry left bell to right hand, as in Fig. XIX.; on next two counts bring both bells to shoulder (Fig. XX.); on next two counts straighten arm, keeping elbow firmly against the side; 2 eights.

Front muscles of arm above elbow.

No. 25. On first two counts bring bells to same position as in last exercise, then on next two counts push bells upwards. On next two counts bring bells back to shoulder; 2 eights.

No. 26. Repeat 24 with left.

No. 27. Repeat 25 with left.

Back muscles of arm above elbow.

(In these four exercises every movement may be made on one count, if music is slow.)



XVII.

No. 28. With arms hanging by sides, bend the wrist as much as possible, do not move the arm above the wrist. Fig. XXI. 2 eights.

Front muscles of forearm.

No. 29. With arms horizontal, repeat 28. Fig. XXII. 2 eights.



XVIII.

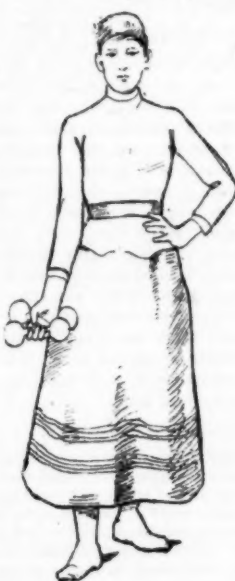
Back muscles of forearm.

No. 30. With arms hanging by sides, twist arm vigorously and rapidly from the shoulder; 1 eight.

No. 31. With arms extended to the side, repeat; 1 eight.

No. 32. With arms raised vertically, repeat; 1 eight.

No. 33. With arms horizontal in front, repeat; 1 eight.



XIX.



XX.

No. 34. } Same as 30, 31, 32, and 33, excepting that
No. 35. } arms are twisted only from elbow.
No. 36. }
No. 37. }

Muscles of the whole arm.

No. 38. With both bells in left hand, and muscles of forearm relaxed, shake right hand as rapidly as possible; 2 eights.

No. 39. Repeat 38 with left;

2 eights.

No. 40. In same way shake right foot.

No. 41. Same with left.

No. 42. Repeat No. 4.

In No. 11, if exercises are given without bells, or behind desks, place hands upon hips, and bend as directed.

Nos. 12 and 13 should be given very slowly; the twisting and bending, however, should be thorough.

No. 19 is so nearly like No. 11 that it may be left out; it is a very graceful movement if given well.

In No. 24 if bells are not used place left hand in right; and, resisting with the left, bring the right hand to the chest, then straighten the right arm and repeat; 2 eights. Same with left.

REMARKS.

For Nos. 9 to 15 inclusive, waltz-time is better than common time. Count as in common time, one and, two and,



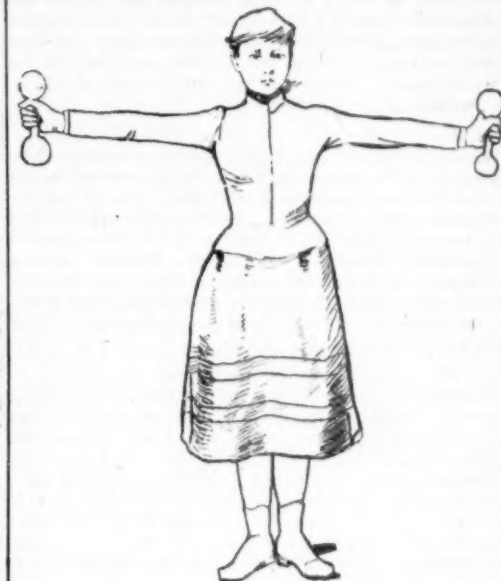
XXI.

three and, etc., but count only the accented notes.

It will be seen that the exercises are given in an order that is very easily remembered; as we sometimes express it, "Beginning at the toes and working out to the fingers."

Keep your pupils good natured, keep good natured yourself—bits of advice easier to give than to follow. At any rate have a good time; make the exercise bright and lively. Don't be too particular about all keeping exact time; it will take some children months before they can keep even good time,—and they can't do it then. The main point is to have good exercise—good, free, easy, dashing exercise.

Don't let a pupil lead—lead yourself. You probably need the exercise more than your pupils do.



XXII.

If you have no music, count aloud, all counting; or sing the count; or sing suitable songs. A bright, lively song is an excellent accompaniment.

Some good tunes are "Money Musk," "The Irish Washer-woman," "Yankee Doodle," "Corn Rigs are Bonnie," "Swinging 'Neath the Old Apple Tree," "Sweet Heather Bells," "The Campbells are Coming," etc.—not exactly classical music, perhaps, but good for the purpose.

Excuse children if they ask to be excused; unless you are positive they are shirking. If you use a little tact you will have few ask to be excused.

Do not think that the number of movements in every set of exercises must be exactly as given above. We give just twice as many in most of the movements, especially in Nos. 7, 8, 16, 17, 24 to 27 inclusive.

A PROGRAM FOR FOUR CLASSES.

In answer to a request for a program, an outline is given that may be varied to suit circumstances:

It will not be easy to arrange a program to fit all schools. Some teachers are able to introduce the "new education" ideas to a considerable extent, others have taken but a slight hold of them. A sketch will be given to cover the four classes; it is supposed each class has twenty minutes, that there are no recesses (this we favor), and that some of the older pupils will oversee the "Busy Work."

9.00	9.30	D Language.	1.00	1.30	All Singing.
9.30	9.40	A B C Geography.	1.30	1.40	D Language.
9.40	10.00	All Drawing.	1.40	2.00	B Numbers.
10.00	10.20	D Numbers.	2.00	2.30	C Numbers.
10.30	10.40	A Language.	2.30	2.40	All Penning.
10.40	11.00	B Language.	2.40	3.00	A B C Physiology.
11.00	11.20	C Language.	3.00	3.30	B & C History.
11.20	11.40	A B Things.	3.30	3.40	A Numbers.
11.40	12.00	A History.	3.40	4.00	

Of course when a class is dismissed it has occupation marked out for it. Thus when D is through with its instruction it should have appropriate "Busy Work;" and so of the rest. The three older classes are joined in geography. This is easily done.

While the older pupils are drawing, the younger should be employed with clay or putty in constructing forms. In fact drawing could come on alternate days, and constructing, etc., be taken up alternately.

By "Things" is meant a study of physics, chemistry, etc., objectively.

It may be thought there is no place made for spelling or grammar. It is supposed that all will compose every day, and time must be taken to see that language is properly used in the compositions. There will be spelling and writing all the day through.

But, after all, the program only shows the plan of the teacher. The spirit of the teacher is the thing. As Emerson said to his daughter, "I do not care what you study; with whom you study is the question." So a school run by any program in some teachers' hands will be a failure. It is the living teacher who puts life into a program that makes the school.

NOTABLE EVENTS.

MORE LAND BOUGHT OF THE INDIANS.—A commission representing the United States government has just bought 250,000 acres of land in Idaho of the Cœur d'Alene Indians for \$500,000. It was found that these Indians had good schools, fine farms, buildings, etc. The mineral land bought of them is valuable. One gold-bearing quartz ledge has been traced for three miles. What is an "Indian reservation"? Who originally occupied this country? How did the English get land of them? How did Penn? What was the result of these two policies? What has been a great cause of Indian wars? Name some generals who fought against them. How is gold mined? In what states is it found? What other metals are found in the United States? What effect had the discovery of gold on the settlement of California?

THE CONGRESS OF THE THREE AMERICAS MEETS.—Delegates of the United States and of the Central and South American republics met in Washington. Mr. Blaine presided and made an address. The delegates from Chili and the Argentine Republic objected to Mr. Blaine's election as permanent president, as he is not a delegate. Among the pleasant events of the strangers' visit to this country was an excursion to the military academy at West Point. Name the powers of Central and South America? What language do they speak? Why?

SUNK IN THE MISSISSIPPI.—The steamer *Corona* burst her boilers about ten miles above Baton Rouge, and sank in a few minutes. Thirty-six lives were lost. None of the survivors know exactly how the accident occurred. The explosion knocked the roof off the cabin, the flying splinters wounding a number of persons, and split the vessel so that she sank like lead. The steamer *City of St. Louis*, that happened to be coming down the river at the time, rescued the survivors. What region does the Mississippi river drain? How far up do steamboats go?

EPISCOPAL CONVENTION IN NEW YORK.—The general Episcopal Convention which was held in New York was attended by bishops from all over the United States. As the centennial of the church in America occurs this year Bishop Whipple's opening sermon related to its struggles and triumphs for the past hundred years. Where is the Episcopal church the established church? Describe the government of the American branch.

LEPROSY IN SAN FRANCISCO.—A Chinese woman died of leprosy at the pesthouse in San Francisco. It has also become known that San Francisco county is caring for ten lepers. These cases, it is said, come from Hawaii and China. There seems to be no alarm at the number of patients in the pesthouse, but some anxiety is expressed about those lepers who, in early stages of the disease, are allowed to walk about the streets. What do you know about the disease? (See description in Wallace's *Ben Hur*.)

ITALY GETS A PRIZE IN AFRICA.—King Menelik, of Abyssinia, has agreed to deal with foreign powers only through Italy. This means that Italy has secured a protectorate over the whole of Abyssinia including Shoa, and the sovereignty over Massowah on the Red sea coast, and Keren and Asmara on the northern highlands. On the death of King John the war which Italy had been waging for a foothold in Africa ceased, as it was known that his successor was friendly toward the invaders. Italy now gets by peaceful means what she fought long to obtain—a strong hold on the most promising quarter of Africa. How does Italy rank among the powers of Europe? What other powers have interests in Africa?

A CHINESE BANK FOR NEW YORK.—Chee Fong, cashier of general Chinese importing firms, is trying to raise money to start a Chinese bank. It is to be the first of its kind in America. It is a very singular thing that the more ignorant a Chinaman is in the English language and ways, the more money he has. As a rule those Chinamen who know how to talk and deal with the Americans are the poorest. The bank will be run as a savings bank, and a small rate of interest will be paid to each regular depositor. Why are banks necessary? Name some things that serve in place of money. What did people do with their treasures before banks existed?

INCREASE IN CATTLE SHIPMENTS.—The price of ocean freight from Boston has increased greatly of late, and the exports are much larger than usual. Grain, provisions, cattle, etc., are taken to England and Ireland, and if the western freight is not enough the vessels put in ballast. Harland & Woolf, of Belfast, have just built a new vessel for this traffic, 520 feet long and of 6000 tonnage. The question of furnishing enough dock room at Boston is getting to be a serious one. What are our principal exports? What do we get from England? What are the benefits secured from an exchange of products?

CORRESPONDENCE.

HUMIDITY.—What is meant by 100 per cent of humidity? I am uncertain as to what it means, and I can find no satisfactory explanation of it in the school text-books.

Ontario.

H. M. STEITZ.

The point of saturation varies according to temperature. A cubic foot of air whose relative humidity is 100 per cent. would, at 90° weigh 497.3 grains, of which 14.17 grains would be water in the form of vapor. The same volume saturated at 40° would weigh 556 grains, of which only 2.885 grains would be water.

Humidity varies according to season and locality. The normal relative humidity for July, in this city, is 71 per cent; for August, 73 per cent; the mean for three weeks beginning July 17 this year was 80. When the air is already laden with moisture, it wants no more, and evaporation from the human body, the effect of which is cooling, is consequently retarded. The percentage of humidity is usually accorded by a hygrometer, composed of two carefully selected and sensitive thermometers, mounted side by side, one having its bulb covered with cloth and kept constantly moist. Evaporation from the wet bulb makes that instrument read lower than its dry bulb companion, and this difference in readings, with the help of tables carefully computed by Glaisher, indicates the relative humidity. For instance, if the dry bulb thermometer stood at 90° and the wet bulb at 68° the relative humidity would be 30 per cent.

THE DIVISION OF TIME IN THE UNITED STATES.—Please give me an explanation of the division of time in this country. At what places is sun time and clock time the same?

New Jersey.

WILLIAM EATON.

For the sake of convenience the United States was divided into districts, whereof the most eastern was, in its mean time, just four hours later than Greenwich, England. The mean time of each division is just one hour later than the mean time of the division immediately east of it. Now the mean time of our division, the second on this continent, is just five hours later than the Greenwich time. The sun time is the time shown by the sun at any place; clock time is that shown by a clock keeping correct time, which is five hours later than Greenwich time. At a certain place in each division, sun time and clock time are the same. The difference between sun time and clock time is the difference between the sun time at any place and the mean time of the division in which it is. If the place is east of the line on which clock and sun time are the same, its clock time is behind its sun time; if it be west of the line of mean time, its clock time is ahead of the sun time. Clock time is standard time.

USE OF "ONTO."—Will you kindly inform me in what dictionary the word "onto," which has several times appeared in your columns lately, can be found. Thus, you speak of "getting onto the bridge." I have observed that the word is much used by the classical and scholarly writers, so one is tempted to ask the authority for appropriating this term. If it is a typographical error for two words—on to—it may be remarked the use of the preposition is superfluous. It is evident one cannot get on the bridge, nor stumble on a continent, without first getting "to" it.

Brooklyn.

I. H. H.

"Onto" is not good English according to the best usage. It may come to be such at some future day, but at present we advise our readers to avoid it.

DELAGOA BAY.—What was the cause of the trouble about Delagoa Bay? Has it been settled yet?

R. G. BENSON.

The Portuguese own Delagoa bay (they call it Lourenço Marquez), and have run a railroad 52 miles long to the frontier of the Transvaal republic. This is of great importance because it is the shortest line to the gold producing districts and coal beds of the Transvaal. This bay itself is the only harbor on the coast of importance; so that it is certain to be a great coaling station. Bechnana-land is also reached by this railroad. The railroad was begun by Col. Edward McMurdo, an American, in 1883, a contract having been made with Portugal, three years were allowed him. He finished it, but the Portuguese government insisted on his building nine kilometers further than he had agreed, and because he would not do this, attempted to seize the railroad, and cancel the contract. As the stockholders were mainly English they protested, and English gunboats were sent to the bay. Col. McMurdo died from the effects of the excitement, and his heirs claim through our government three and a half millions as damages. It now looks as though Portugal would settle by arbitration.

CORRECT EXPRESSION.—Is it ever correct to use the expression "it is me"? At the institute I attended the confessor said it was good grammar.

S. E. L.

There are many good writers who contend that this form is correct. The old rule is, that "the verb to be, takes the same case after it as before it;" and so if grammar is to be

followed, "It is me" is wrong. But if good writers use it, then usage is an authority for saying it may be used. We advise the grammatical forms.

POLITICAL GEOGRAPHY.—Tell me some of the best books on political geography.

F. W. B.

All of the geographies are based on political divisions; for example, when you teach about Ohio, you are teaching "political geography." If you teach about North America or South America as continents, you are teaching natural geography, or, as it is called, physical geography.

THE SIZE OF PARIS, PHILADELPHIA AND LONDON.—In the *SCHOOL JOURNAL* in the account of the globe at the exposition at Paris it is stated that "Paris occupies a third of one inch, and that London and Philadelphia are of course much larger." Please tell me if the word *Philadelphia* is not a mistake. How can Philadelphia be larger than Paris?

F. B. H.

Philadelphia bears no comparison to Paris so far as population is concerned. The paragraph quoted, of course, referred to area. The *cite*, on the *Ile de la Cite*, in the Seine, forms the oldest part, the kernel of Paris, and around this center the rest of the city forms three belts. The first belt, the *ville* proper, is bounded by the inner boulevards. In the second belt are the faubourgs, surrounded by boulevards, running along the former demarcation wall. Up to 1890 the *barrieres* of this wall formed the gates of Paris, but in that year the wall was broken down. The third belt extends to the bastioned wall, beyond which the whole vicinity is covered with villas, gardens, and parks. The whole area covers 135 square miles. Philadelphia includes 129,000 square miles. Not counting the Parisian suburbs above mentioned, Philadelphia is considerably larger. The London postal district covers 250 square miles.

A COMBATIVE PUPIL.—I have a pupil that I know will rebel if I attempt to punish her with a rod. She is 16 or 17 years old. What would you do?

R. R. M.

Whether she will rebel or not, do not use the rod or threaten to. Just what you should do if she refuses to obey we cannot say, except to get your own disposition right first and then be tactful. She must feel first that you love her and want to do her good. Here is the whole secret of managing "hard cases."

NORMAL METHODS.—1. What is the best book on normal methods? 2. Will you give me any help you can, as I have not been able to attend a normal school?

R. C.

There is nothing better in the English language than "Parker's Talks on Teaching." If this book is thoroughly understood and followed, it will make one a pretty good normal teacher. 2. The teacher's helps we can give you are the *JOURNAL* and *INSTITUTE*.

CORRECT SENTENCE.—Is the sentence, "These are all there are" correct?

SUNSHOWER.

Yes.

OPINIONS DIFFER.—1. Which is the longest river in the world? 2. How many new states have already been admitted to the Union, and when will the remaining of the four be admitted?

PAULINE.

1. It is impossible to tell. Some say Mississippi with the Missouri, some the Congo, and some the Nile. 2. No new states have been admitted. When the president issues his proclamation there will be four additional ones.

SYNTHETIC SYSTEM OF READING.—What is the synthetic sound system of teaching reading and where can it be learned?

Franklin, Tenn.

PUZZLED.

This method of teaching reading consists in leading the pupil to put words together so as to form sentences. It is really a species of composition. An "Indiana teacher," to whom thanks, says it is employed in the Pollard readers, and that some teachers favor it and many do not.

SEVERAL QUESTIONS.—1. I am teaching in the primary department. How can I interest my pupils in familiar objects, and do you publish any work on this subject? 2. What is meant by drill tables by 1's, 2's, 3's, etc., including both addition and subtraction? 3. How can I reverse the multiplication table to division, so as to make it easy for young pupils? 4. Will some experienced primary teacher answer these questions, and state how they conduct the different classes to make them interesting? 5. What does the Paris exposition commemorate? 6. When using an apple as the object of a lesson, how can I make it interesting. A.

1. You will show an interest in objects; thus, if it is a rose you will talk about it and get them to talk; if it is a pebble you will do the same. Next you will give lessons on objects; there are several books, one by Calkins, one by Sheldon. 2. There are tables published that give a number, as 5, and then 1, 2, 3, etc., are added; they are in the arithmetics; you can make them. 3. You ask, for example, "Three 4's are how many?" Then you ask, "How many 4's in 12? how many 3's in 12?" 4. Read the "Quincy Methods" to know how to make school interesting. 5. The fall of the Bastille. 6. Now you have us. How does a young woman make herself interesting to her young man? This you know of course. Just so you make yourself and the apple interesting to your pupils. You must be interested first of all, remember.

SUPR. J. FAIRBANKS, of Missouri, says: Your *JOURNAL* is filled with good things, and exceedingly enjoyable as well as instructive.

EDUCATIONAL NOTES.

THE formal opening of the new state normal school at Chico, California, took place on Sept. 26, and it was an occasion worthy of the grand enterprise which has been inaugurated there.

THE Teachers' Music Association of this city have secured the services of Frank H. Damrosch and will give lessons in Association Hall, Mondays at 4.15 P. M. Advanced classes will meet at 4.15 P. M. on Thursdays. This is looking towards the World's Fair, we think.

CLARK UNIVERSITY at Worcester, Mass., has just been formally opened and dedicated to "science, letters, art, and human progress." President G. Stanley Hall delivered an address on the value of a university education. James G. Clark, the founder, was present.

THIS is an object lesson that will not be forgotten. On October 5, Principal Johnson of Grammar School 15 in Brooklyn, gathered 582 pupils and teachers of Brooklyn grammar schools, who have been reading the legends of Sleepy Hollow, to visit the scenes of the legends, and Sunnyside, the home of Irving. As this will be read by Western teachers, we hear a sigh and the exclamation, "I wish I had been there!"

A FAIR is to be held at Dallas, Texas, beginning October 15, and the state superintendent of schools invites teachers to send materials, text-books, etc. Here will be a good opportunity for teachers to send: 1. Writing books; 2. Drawings; 3. Apparatus made by pupils; 4. Collections made by pupils; 5. Descriptions, etc., made by pupils.

WHEN Supt. R. W. Stevenson left Columbus where he had worked most successfully for many years, we knew he would soon find a field suited to his talents and experience. This place has been found at Wichita, Kansas, the leading city in that enterprising state. The people have given him a royal welcome. It is a land of sun-flowers, great corn fields, innumerable cattle, and temperance. The people have already found out that in Supt. Stevenson they have an able counselor in the important work of educating their children.

THE first thing Supt. Will S. Monroe did after taking charge of the schools of Pasadena city, California, was to secure the services of Mrs. Clara A. Burr as principal of his primary schools. No progressive educator could have made a wiser selection. Himself a close student of primary methods and an ardent believer in the doctrine that in order to have good schools we must lay the foundations well, the schools of Pasadena will take proud rank with the best in the country. The city is to be congratulated on being able to secure educators of Supt. Monroe's and Mrs. Burr's standing and worth. Evidently Pasadena has a board of education that desires the best talent the country affords.

WM. M. GIFFIN who has been elected vice-principal of the Cook County normal school, writes us from that place, as follows: "I wish you could have been with us at the meeting of the Chicago teachers, held a few days ago, to have heard the annual address of Superintendent George Howland on 'School Supervision.' Music hall was packed with teachers. Mr. Howland held the attention of his audience from first to last, and for good, sound, practical common sense, the paper was second to none we have ever heard on that subject."

As announced in a previous issue of the JOURNAL, pedagogics has been formally added to the Columbia college curriculum. The lectures on this subject are open to teachers and other special students on payment of a small annual fee. Prof. Nicholas Murray Butler will himself take charge of the course, and will meet those desiring to join the class, so as to obtain further information concerning it, on Friday afternoon, October 11, between the hours of 3:30 and 4:30 in room 53, Hamilton Hill, Columbia College (Madison avenue and 49th street). The lectures will formally begin on the Friday following. This course, it must be borne in mind, is a university course, and counts for the degree of Ph.D.

THE Philadelphia Times, the Baltimore American, the Cincinnati Inquirer, and many other papers of promi-

ence have had articles urging the teaching of manners. One says: "At the dismissal of a school there was a scene that resembled savagery rather than civilization. Now we were told that the principal of that school is a good teacher of mathematics. We say those boys should be trained in manners, for that will help them in the battle of life a good deal more than square root."

This attention by the daily press to the schools shows that the practice of education is going to be inquired into; at least, the results of that practice will be inquired into. If a boy knew that his manners had the relation to his success they really do have, he would give attention to them.

PROF. GUSTAVE GUTTENBERG who has taught in the high school at Erie, Pa., so successfully has been appointed in the place of Prof. W. T. Jackman in the Central high school of Pittsburgh. He is a thorough and enthusiastic student of mineralogy and will soon prepare a series of papers for the JOURNAL.

THE Rhode Island Institute of Instruction will hold its annual meeting October 24-26 in Infantry Hall, Providence. The engagements already made for addresses give promise of a meeting of more than usual interest. President E. Benjamin Andrews of Brown University, and Augustine Jones of Friends' School, Superintendents James McAlister of Philadelphia and Thomas M. Balliet of Springfield have, in addition to some fifteen others from among the superintendents, high, grammar, and primary school teachers of Rhode Island, consented to read papers or participate in discussions. Gov. Ladd, Mayor Barker of Providence, State Commissioner Stockwell, and Hon. A. T. Draper, superintendent of public instruction in New York, will make addresses. In this day, when teaching is recognized as one of the leading professions and teachers are more and more appreciative of the importance and magnitude of their work, it is safe to predict a large and enthusiastic gathering. A program giving full particulars will be issued October 15 and will be forwarded to all members, and to any others who will apply to the secretary, Charles N. Bentley, Central Falls.

MISS MARY GARRETT'S new college building is about completed, and will be opened in a short time. The only daughter of John W. Garrett has determined to devote a large portion of the fortune left her by her father to the higher education of her sex. Miss Garrett gives the building, costing nearly \$250,000. It is situated in a prominent part of Baltimore, and is a model school building.

THE next (thirty-fifth) annual meeting of the New York Association of School Commissioners and Superintendents will be held at Cortland, November 6, 7, and 8. The subjects for discussion are: 1. Patriotic Education. 2. Compulsory Attendance. 3. State Aid. 4. Trustees' Meetings. 5. Grading of Rural Schools. 6. Free Text-Books. 7. Qualifications of School Commissioners. 8. Unification of the Educational Association of the State. 9. Qualifications for Admission to Training Classes.

The subject that most especially needs discussion and action seems to be left out—improving the qualifications of the teachers in the rural schools. If the whole session was spent on that, some good might come. This, gentlemen, is the task that more than any other lies before you. We say, plan for a training school in each county, at least, which those who want 2d or 1st grade certificates may attend; a 3d grade certificate may entitle to admission. These should be training schools, schools where the pupils should see good teaching, and do good teaching.

A GREAT and imposing event will occur at Washington November 13. The new Catholic university near that city will then be opened, and bishops are expected from all parts of the United States, Canada, England, Scotland, and Ireland. Cardinal Gibbons will conduct the dedicatory ceremonies, and Bishop Gilmore, of Cleveland, will deliver the sermon.

MANY suppose that Queen Victoria has a very easy time. The fact is she is one of the hardest worked officials in the realm. In addition to answering her private correspondence, she must sign government papers, decide questions of etiquette, changes of uniform in the army, and many other matters.

THE NEW YORK EDUCATIONAL BUREAU finds skilful teachers are more in demand this year than ever before. This bureau makes a specialty of supplying teachers of high grade. Those who are seeking first-class situations,

and those who are seeking first-class teachers, should address at once, with stamp, HERBERT S. KELLOGG, 25 Clinton Place, New York City. It may lead to something very promising.

NEW YORK CITY.

THE first meeting, we believe, ever held of the superintendent of schools of this city with the principles of the grammar schools took place at the board of education rooms last week. It concerned itself with matters of detail and no discussion of educational matters came up. But the ice has been broken; and now it is only a question of time when all of the New York teachers will unite in pursuing a post-graduate course of pedagogical study.

THE board of education took up the study of German at its last meeting only to "lay it over." It is not likely it will be taken off the course this year, but it is certain to be in the near future.

THE vacancy caused by the death of assistant Supt. Griffin in this city will probably be filled from the ranks of the vice principals. While the salary (\$3,500) is slightly larger than that of a principal (\$3,000) he is chosen for a term of two years, while a principal is good for his natural life. Among those named for the place are Edgar D. Shimer, No. 20; James Lee, No. 62; Edward Farrell, No. 46; Thos. Moore, No. 86; J. F. Townley, No. 12; C. R. Burke, No. 34. All will agree that Mr. Shimer is abundantly qualified for the position. Prof. H. M. Leipziger, who has made a good record, is also mentioned as a candidate.

THE School of Pedagogy, University of the City of New York, opened October 5, in the Asbury M. E. Church on Washington Square. There were 600 teachers present—a wonderful gathering, and great enthusiasm was manifested. Vice-Chancellor MacCracken presided. Dr. Charles Butler, president of the university council, expressed the utmost confidence in the speedy completion of the endowment, and the granting of degrees to the graduates of the school. The interest of \$25,000 is guaranteed to the school for three years. The class this year promises to number about 200. The lecture on Pestalozzi is to be delivered October 12, at the same place at 11 A. M.

STATE ASSOCIATIONS.

CALIFORNIA, first week in January, Los Angeles, Prof. Ira More, Los Angeles, president; Miss Mary E. Morrison, 2328 Polson St., San Francisco, secretary.

CONNECTICUT, Oct. 18-19, Hartford.

ILLINOIS, Dec. 25-27, Springfield.—Dr. S. H. Peabody, Champaign, president; Miss Lyde Kent, Jacksonville, secretary.

IOWA, Dec. 31, Jan. 1-3, Des Moines.—Miss Lottie E. Granger, Clarinda, president.

KANSAS, Dec. 25-27, Topeka.—J. N. Wilkinson, Emporia, president; J. W. Ferguson, Kansas City, secretary.

MAINE, Dec. 28-29, Bangor.—George C. Partridge, Farmington, president; W. Esterbrook, Gorham, secretary.

MICHIGAN, Dec. 25-28, Lansing.—L. R. Fiske, Albion, president; H. M. Slawson, Coldwater, secretary.

MISSOURI, Moberly, Springfield and Warrensburg.—S. S. Laws, president; L. E. Wolfe, Moberly, secretary.

NEBRASKA, March 25-27.—Chas. E. Bessey, Lincoln, president; Emma Hart, Wisner, secretary.

NORTH DAKOTA, Dec. 27-28, Grand Forks.

SOUTH DAKOTA, Dec. 26-28, Yankton.

RHODE ISLAND, Oct. 24-26, Providence.—Geo. E. Church, 13 Adelaide ave., Providence, president; Charles N. Bentley, Central Falls, secretary.

THERE was unusual interest in the marriage which took place in Pittsburg, Pa., on Oct. 2, between Herbert Steele Kellogg and Louise Livingston Farley. Both are Livingstons in the eighth generation on their mothers' side from Robert, who came over from Scotland in 1712, to take possession of a grant, from the king, of land now in Columbia County, N. Y., on the Hudson river. Robert was succeeded by Philip, he by Robert, he by Peter R., he by Moncrieffe. The latter had several children: one Mary married Oliver Steele (the son of the first bookseller in Albany, N. Y.); his daughter married Amos M. Kellogg whose youngest son is Herbert, one of the parties to the wedding. Moncrieffe also had a son Rensselaer whose daughter Fanny married William T. Farley; the daughter of these is Louise, the other party to the wedding. A large number of friends were present at the ceremony, and gifts were showered on the young couple. Mr. Herbert Steele Kellogg began, in January last, the founding of a bureau for teachers in connection with the publishing house of E. L. Kellogg & Co., and it has grown already to goodly proportions. He will start off in his married life with the good wishes of a large circle of friends.

You will never realize the great benefit Hood's Sarsaparilla will do you till you give it a fair trial.

BOOK DEPARTMENT.

NEW BOOKS.

JONATHAN EDWARDS. (In American Religious Leaders Series.) By Alexander V. G. Allen, D.D., Professor in the Episcopal Theological School, in Cambridge, Mass. Boston and New York: Houghton, Mifflin & Company. \$1.25.

Bancroft, our great American historian, has said: "He that would know the working of the New England mind in the middle of the last century, must give his days and nights to the study of Jonathan Edwards." The "New England Mind" is the heaven whose working has since pervaded—however faintly—the whole lump of these United States with that peculiar flavor of self-denying, ascetic cultivation which is perhaps the one characteristic yet remaining to be recognized as distinctively native American. Thus subtly—yet to a keen observer, appreciably—as a few grains of musk will odorize a cathedral, have the very Pacific slope and the Texas Border been Yankeeified by the spirit of which Jonathan Edwards was the chief apostle, missionary, and pioneer. However far we may have departed from his teachings, and whatever we may think of his theology, he is nevertheless always and everywhere interesting on literary and historical grounds alone. No intelligent student can fail to be impressed with his imposing figure, as he moves in the vastness and mystery of enchanted distance through the wilds of the new world. The author of the present work has endeavored to reproduce Edwards from his books, making his treatises, in their chronological order, contribute to his portraiture as a man and as a theologian. The work is at the same time sympathetic, critical, and informing; showing what Edwards thought, and how he came to think as he did; which is what we most desire to know.

SCHOOL HYGIENE; or The Laws of Health in Relation to School Life. By Arthur Newsholme, M. D. Boston: D. C. Heath & Co., Publishers. 143 pp. 50 cents.

The great importance of the subject discussed in this book by Dr. Newsholme, is evident to all, and is engaging the special attention of school boards and committees. This volume, however, is designed more exclusively for the teacher, and has been prepared to furnish accurate information on the subject, with a view to assisting those engaged in studying it in training colleges or elsewhere. Part I. treats of "Schools," under the subjects: Site of School,—Construction of School Buildings,—School Furniture,—Lighting of School-Rooms,—General Principles of Ventilation,—Natural Ventilation,—Ventilation and Warming, and Drainage Arrangements. Part II. treats of "Scholars," under, Mental Exercise,—Excessive Mental Exercise,—Age and Sex in Relation to School Work,—Muscular Exercise and Recreation,—Rest and Sleep,—Children's Diet,—Children's Dress,—Baths and Bathing,—Eyesight in Relation to School Life,—Communicable Diseases in Schools, and School Accidents. Dr. Newsholme is in all respects the right person to prepare a work on School Hygiene, for besides being a physician, he is a Medical Health Officer, Medical Referee to two training colleges, and holds several other important medical offices, in connection with schools.

COMMON SCHOOL SONG-READER. A Music Reader for Schools of Mixed Grades. First Lessons in Singing and Reading Music with Exercises and Songs in One, Two, and Three Parts, and Directions to Teachers. By W. S. Tilden. Boston: Published by Ginn & Co. 176 pp. 45 cents.

This "Music Reader" is not designed to take the place of the regular series of music readers in graded schools, but to adapt and apply the "Natural System" of musical instruction, and it is made to conform to the method employed in the regular series, so that pupils may pass readily to the higher books as they are prepared. The selection of songs introduced is designated to furnish something to suit the taste of pupils of different ages, and all are natural and easy in their construction. For those schools who are prepared for such work, a short course in part singing is given; also, some instruction in the bass staff is found suitable for older boys, to this is added, songs written for soprano, alto, and bass. The plan of singing from figures which is developed in this book, offers all the advantages of a "simplified notation" that are needed in the early study of music. The two divisions of the book are, "Songs to be Memorized for Analysis," and "Songs in Connection with the Reading Lessons and Miscellaneous Songs."

MACAULAY'S ESSAY ON LORD CLIVE. Edited by Vida D. Scudder. Leach, Shewell & Sanborn, Boston and New York. 147 pp.

"The Student's Series of English Classics" is an excellent one, for it aims to supply literature which is of the very best and most valuable kind, and the Association of New England Colleges have shown great wisdom in the selection of their subjects for the literary training of young students. This peculiarly brilliant and characteristic essay on Lord Clive, is selected as a piece of literature, and not history. Uniform with other volumes of this series, as an introduction, chief facts in Macaulay's life are found. These are followed by a remarkably clear and beautiful map of India. A biographical sketch of Macaulay, the man, is next found, followed by the titles of six famous essays on English History by Macaulay,—then Macaulay, the Writer,—Hints on the Handling of an Essay,—Lord Clive,—Introduction to Notes, and Notes. This celebrated essay richly repays study as a piece of pure literature; and by it students are put into intelligent and discriminating sympathy with the work of one of the masters of English prose. It may add much to the interest of "Coleridge's Ancient Mariner," "Webster's First Bunker-Hill Oration," and "Macaulay's Essay on Lord Clive," to know that they are the works of three separate teachers of Wellesley College. The books are uniformly bound in dark blue with black lettering, cream-tinted paper, and excellent type.

FRENCH LIFE IN LETTERS. By Mrs. Molesworth. With Notes on Idioms, etc. London: Macmillan & Co., and New York. 93 pp. 40 cents.

This little volume is one of a Primary Series of French and German Readings published by Macmillan & Co., with notes and vocabularies. It contains ten letters, including travel, arrival, visiting some of the large cities, a

matinee, etc. The type of the book is very clear and good, and the paper excellent. Mrs. Molesworth, the author, has a delightful way of writing children's stories.

OUR BOY AND GIRL. By Ellen Patton. New York: John B. Alden, Publisher. 298 pp. Cloth, \$1.00.

Mrs. Patton, a Kansas lady, tells in this volume the story of a very bad boy, and his sister a very good girl, and how she succeeded in finally saving her brother. The boy would not, perhaps, take the prize for mischief in competition with "Peck's Bad Boy," but he might take the second prize. The story is told as a warning, and not for the sake of amusing the reader. The relation of experiences of life on the plains of the West, gives the book an added charm.

NATIONAL KINDERGARTEN MANUAL. Containing Practical Model Lessons, Rules and Lectures, for the Kindergarten and the Nursery, Stories, etc. By Mrs. Louise Pollock. Boston: De Wolfe, Fiske & Co. 177 pp.

In preparing and publishing this volume, Mrs. Pollock brings to it the ripe experience of nearly thirty years of success in kindergarten work, and her object is to disseminate a knowledge of the kindergarten philosophy among teachers as well as parents. It is divided into three parts: first, Model lessons for kindergarten and primary schools; second, stories for the Kindergarten and the Family; and third, Lectures on the Kindergarten in the Nursery. At the request of her teachers and normal students, Mrs. Pollock has introduced a few practical lessons and stories, which illustrate the proverbs and verses taught during conversational exercises, and to comply with the wishes of many mothers who have attended her lessons on the kindergarten in the nursery, she has also given educational and hygienic rules, eight of which are given with each lecture to mothers, teachers, and nursery-maids. These rules are gathered from the highest educational and medical authorities in the country, and have all been tested in Mrs. Pollock's personal family experiences. The "Characteristics of a True Kindergarten" is an excellent chapter, full of instruction and helps to teachers or mothers. The entire book is full of fresh, bright, and pleasant things to do, showing how truly the author has turned to good account her years of experience in kindergarten work.

A COMPLETE DICTIONARY OF SYNONYMS AND ANTONYMS, or Synonyms and Words of Opposite Meaning. With an Appendix. By The Rt. Rev. Samuel Fallons, A. M., D. D. Fleming H. Revell, Chicago, 148 and 150 Madison Street; and New York, 12 Bible House, Astor Place. 512 pp. \$1.00.

A book of synonyms and antonyms is now almost as necessary to the thoughtful student as an unabridged dictionary, and the author of this volume has prepared it, designing to aid students, literary men, public speakers, and others, in finding the best word to express the thought they wish to convey. It embraces a dictionary of Britishisms, Americanisms, colloquial phrases,—the grammatical uses of prepositions and prepositions discriminated; a list of homonyms and homophonous words; a collection of foreign phrases, and a complete list of abbreviations and contractions used in writing and printing. The "Classical Quotations" consist of words, law terms, maxims, striking proverbs, phrases, and colloquial expressions, from the Greek, Latin, Danish, Dutch, French, German, Italian, Portuguese, and the Spanish languages, which are often found in books and conversation. There is also given a full list of abbreviations and contractions used in printing and writing. This volume is perfect of its kind, and all standard dictionaries have been laid under contribution for its preparation. It is neatly bound and has good paper and type.

BENJAMIN FRANKLIN. By John T. Morse, Jr. (In the American Statesmen Series.) Boston and New York: Houghton, Mifflin & Co. \$1.25.

The author of this biography offers in his preface a modest excuse for a work which he considers almost superfluous, because it has been so well done by others; and scanty because of the volume's disproportion to the greatness of the subject. But the book speaks well for itself, and needs no apology; it is a compact and comprehensive summary of Franklin's life; bearing especial reference to its relations with this series, which of course could not be complete if the career of one of our country's earliest and greatest diplomats had been slighted.

THE HANSA TOWNS. By Helen Zimmern. (The Story of the Nations Series.) New York: G. P. Putnam's Sons. \$1.50.

The Hansa was one of the earliest representatives of that federal spirit which will no doubt, as the author suggests, some day help to solve many old world problems. This is probably the first history of the Hansatic League in the English language; that is, the first of any considerable extent. A certain knowledge of German history on the reader's part is assumed; but few have had time or opportunity to study with any intimacy the workings of that league whose existence marks one of the most remarkable chapters in continental history. This "story" is told in the interesting fashion that characterizes all the series, and is printed and bound in the same elegant and substantial manner.

THE WALKS ABROAD OF TWO YOUNG NATURALISTS. From the French of Charles Beaugrand. By David Sharp, M. B., F. L. S., F. Z. S., President of the Entomological Society of London. Fully illustrated. 8vo. \$2.00.

This is a fascinating narrative of travel and adventure, in which is introduced much valuable information on natural history subjects. A reading of the book will tend to foster an interest in zoology. There are few changes more recreative to mind and body, fatigued by daily routine, than the study of natural history; yet few can undertake this pursuit without some such assistance as this book so pleasantly affords. The enjoyment of its contents is enhanced by the book's fine appearance inside and out.

THE LAND OF THE MONTEZUMAS. By Cora Hayward Crawford. New York: John B. Alden.

This is a lively, well-written account of a trip more than usually adventurous, for a woman, partly across the continent and then southward through that land of ancient mystery which has lately attracted so much attention from travelers and historians. The route of the author and her mother—traveling companions—is described beginning with Denver, the "Rockies," and the ascent of

Gray's Peak; thence through Colorado scenery and southward over the border into Mexico, where many points of interest are visited and with an account of their present appearance and status goes some instructive reference or suggestive reflection concerning their past. The plains, hotels, and beggars; the mines, the social customs, and political complexion of the people, all are touched in a manner both improving and entertaining, which is the next best thing to seeing all these things for oneself. The book is published in excellent typographical form.

ANNOUNCEMENTS.

CASSELL & Co. announce a book that is sure of a sympathetic audience, viz., "Dante Gabriel Rossetti as Designer and Writer," by his brother Wm. M. Rossetti, including a prose paraphrase of "The House of Life."

LEE & SHEPARD have among their latest books "Pens and Types; or Hints and Helps for those who Write, Print, Read, Teach, or Learn," in a new and improved edition, by Benjamin Drew.

THE SCRIBNERS' two first editions of cloth and paper of Robert Louis Stevenson's novel, "The Master of Ballantrae," were exhausted several days before publication. Second editions of each were immediately printed.

FORDS, HOWARD & HULBERT publish "Unto the Uttermost," by James Campbell, a fresh, strong contribution to the religious discussions of the day.

D. C. HEATH & Co., Boston, have just published, "Sept Grand Auteurs du XIXe Siècle: Lamartine, Hugo, de Vigny, de Musset, Théophile Gautier, Mérimée, Coppee," by Alcee Fortier, professor of French, Tulane University of Louisiana.

A. C. McCLURG & Co.'s "Great French Writers," is considered one of the best specimens of translating done for some time. The translator is Prof. Melville Anderson, of the Iowa State University.

WHITE & ALLEN, who inaugurated last year a series of illustrated editions of old-time ballads such as "The Old Folks at Home," have followed up their success with a new series, to be published shortly. Among these are "Old Uncle Ned," "The Blue Bells of Scotland," and "The Bells of Shandon."

ROBERTS BROTHERS announce:—"Louisa M. Alcott: Her Life, Letters, and Journal," edited by Ednah D. Cheney; and "A Few More Verses," by Susan Coolidge.

LONGMANS, GREEN & Co. will shortly publish, Andrew Lang's "Prince Prigio," with illustrations by Gordon Browne. The Prince is a great grandson of the Gliglio of Thackeray's "Rose and the Ring;" and many of the old fairy tricks serve a new purpose in Mr. Lang's story.

A. S. BARNES & Co. have just put on the market Arthur Gilman's "First Steps in English Literature," which has been carefully revised by the author.

G. P. PUTNAM'S SONS announce among their publications "An Experimental Study in the Domain of Hypnotism," by H. von Kraft-Ebing, professor of psychiatry and nervous disease in the University of Graz, Austria; translated by Charles G. Chaddock, M.D.

CATALOGUES AND PAMPHLETS RECEIVED.

Kindergarten Froebel Institute, Washington, D.C. Miss Susie Pollock, principal.

State Normal School, Albany, N. Y. Nineteenth Term, 1889. Edward P. Waterbury, A.M., Ph.D., LL.D., president.

Catalogue of the State Normal School, Peru, Nebraska, 1888. Geo. L. Farnham, A.M., principal.

Second Annual Catalogue of the Southern Normal College, Linden, Tenn., 1889-'90. R. L. Sutton, B.S., principal.

Catalogue of Avery Normal Institute, Charleston, S.C., 1889. Morrison A. Holmes, principal.

Catalogue of the State Normal School, Mansfield, Pa., 1889-'90. D. C. Thomas, A.M., principal.

Annual of the University of Deseret, Salt Lake City, 1889. Orson F. Whitney, Chancellor.

Fifth Annual Report of the Marlin Public Schools, Marlin, Texas, 1888-'90. E. M. Pace, principal of white school; R. J. Willis, principal of colored school.

Circular of the State Normal and Training School, Geneseo, N. Y., 1888. Hon. James Wood, president.

Address on the Past, Present, and Future of Scientific Agriculture, by Peter T. Austen, Ph.D., F.R.S., professor of chemistry in Rutgers College.

Catalogue and Circular of Slippery Rock State Normal School, Butler County, Pa. James E. Morrow, A.M., principal.

Catalogue of the Normal and Scientific Institute, Bloomfield, Iowa, 1889. R. S. Galer, A.M., principal.

MAGAZINES.

St. Nicholas for October has an instructive article on those firm friends of man, the dogs, entitled, "Among Dogs of High Degree," "The Making of a Steel Gun," is an excellent bit of descriptive writing.

The October Century has a group of illustrated articles on educational topics. Among the topics discussed manual training is prominent.

General O. O. Howard has written an article for the young folks who read *Wide Awake*, which will also interest and enlighten their elders; we refer to the little paper in the October number entitled, "How many Indians in the United States?"

"General" Booth of the Salvation Army, is among the notable people sketched in the October *Phrenological Journal*.

Babymoon for October in an article on "Nursery Cookery" contends that however skillfully and judiciously food for children may be selected, such labor is frequently lost by being supplemented by poor cooking.

The *London Spectator* calls attention to "The Begum's Daughter," Mr. Bynner's serial novel now appearing in the *Atlantic Monthly*, as a "very powerful story."

The news of Stanley's march toward Mombasa lends an extraordinary interest to the article by Joseph Thomson, in the October *Scribner's* under the title "How I Crossed Masai-land."

Hearty!

The laborious and expensive efforts to establish a footing in popular regard, for a worthy commodity, are often indirectly supplemented by gratuitous testimony.

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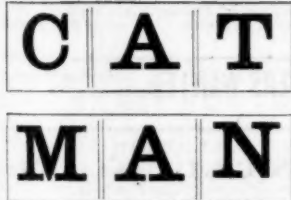
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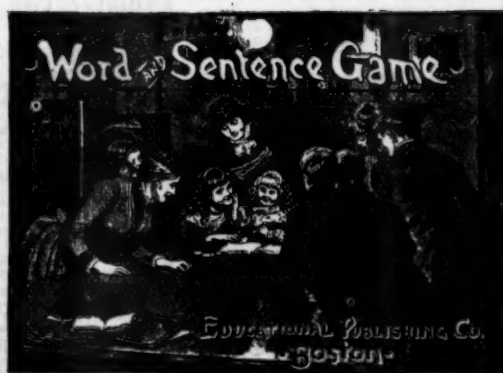
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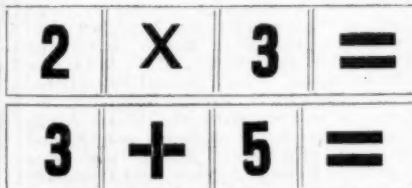
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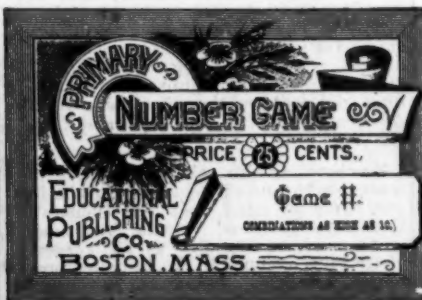
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"Why, I did not know that you and that little girl had got acquainted yet," said a Roxbury father to his 6-year-old son, who came in from a walk on the adjoining lawn with the tiny daughter of the new next-door neighbor.

"Yes, Clara and I have been 'quainted lots of days," said the very small boy.

"What did you say to her first?" asked the father.

"Oh, Clara spoke to me first. She came down by the chicken house and asked me how many prayers I say nights, and I told her, and then I asked her how many prayers she says and she told me, and then we were 'quainted.'"

Extraordinary, but nevertheless true. We refer to the announcement of B. F. Johnson & Co., of Richmond, Va., in which they propose to show working and energetic men how to make from \$75 to \$250 a month above expenses.

The public school system of crowding blank minds with uncorrelated facts produces occasionally startling results. A young lady recently astonished her parents by her familiarity with English history. "Oh, yes," said she, "I know all about Henry VIII. He got a divorce from Anne Boleyn, and the Pope sent a big red bull to butt him off his throne."

The same young lady was boasting the antiquity of her family.

"They are very, very ancient," said she. "They date back to 400 B. C. But what does B. C. mean anyway?"

A London bishop had gone down into the country to visit a charitable institution, into which poor lads had been drafted from the east end of London, and, in addressing them, he congratulated them on the delights of their new residence. The boys looked unaccountably gloomy and downcast, and the bishop kindly asked:

"Are you not comfortable? Have you any complaints to make?"

At last the leader raised his hand. "The milk, my lord."

"Why, what on earth do you mean?"

"The milk here is tenfold better than you ever had in London!"

"No, indeed, it ain't!" cried the boy. "In London they always buys our milk out of a nice clean shop, and here—why, here they squeezes it out of a beastly cow!"

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Two boys quarreled and had a fight. The teacher called them to his desk and asked them to state the case to him.

"He struck me," said one of the boys.

"He said I stole his knife," said the other.

"I said somebody stole it," said the first boy.

"Well, you meant me," replied the other.

"Why, Charlie," said the teacher, "if Willie had told me that somebody had stolen his knife, it would not have made me angry. I should not have thought that he meant me."

"Well, but you don't steal," was the ready answer.

Malaria.

Literally means bad air. Poisonous germs arising from low, marshy land, or from decaying vegetable matter, are breathed into the lungs, taken up by the blood, and unless the vital fluid is purified by the use of a good medicine like Hood's Sarsaparilla, the unfortunate victim is soon overpowered. Even in the more advanced cases, where the terrible fever prevails, this successful medicine has effected remarkable cures. Those who are exposed to malarial or other poisons should keep the blood pure by taking Hood's Sarsaparilla.

A boy who had been sent away from home to a school in a neighboring city, wrote to his aunt as follows: "Dear Helene,—Carl coit six mice in one night. How is mamma's arm? Tell rose that I chained seat and got put up. I am righting letters all a time. No botty halped me and I think it is good. And if some are rong you had some rong to, and if you don't want to bellefe it then ast mamma. Your loving boy, Walter."

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Cheap tickets to all points in Kansas, Colorado, Indian Territory (Oklahoma), Texas and other States and Territories in the West will be sold by The Santa Fe Route from Chicago and other points along the line, on August 6 and 20, September 10 and 24, and October 8.

For particulars ask your Ticket Agent or write to John J. Byrne, Assistant General Passenger Agent, Santa Fe Route, Chicago, Ill.

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Mrs. Jos. Lake, Brockway Centre, Mich., writes: "Liver complaint and indigestion made my life a burden and came near ending my existence. For more than four years I suffered untold agony. I was reduced almost to a skeleton, and hardly had strength to drag myself about. All kinds of food distressed me, and only the most delicate could be digested at all. Within the time mentioned several physicians treated me without giving relief. Nothing that I took seemed to do any permanent good until I began the use of Ayer's Sarsaparilla, which has produced wonderful results. Soon after commencing to take the Sarsaparilla I could see an

Improvement

in my condition, my appetite began to return and with it came the ability to digest all the food taken, my strength improved each day, and after a few months of faithful attention to your directions, I found myself a well woman, able to attend to all household duties. The medicine has given me a new lease of life, and I cannot thank you too much."

"We, the undersigned, citizens of Brockway Centre, Mich., hereby certify that the above statement, made by Mrs. Lake, is true in every particular and entitled to full credence."—O. P. Chamberlain, G. W. Waring, C. A. Wells, Druggist.

"My brother, in England, was, for a long time, unable to attend to his occupation, by reason of sores on his foot. I sent him Ayer's Almanac and the testimonials it contained induced him to try Ayer's Sarsaparilla. After using it a little while, he was cured, and is now a well man, working in a sugar mill at Brisbane, Queensland, Australia."—A. Attewell, Sharbot Lake, Ontario.

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